

## CHAPTER 24

### U.S. NAVY

### HELICOPTER

## AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION

#### 24-1. INTRODUCTION AND USE.

24-2. This section contains emergency rescue and mishap response information illustrations in alpha-numerical order relative to type and model of aircraft. This arrangement of illustrations is maintained from Chapter 4 throughout the remainder of the publication.

#### 24-3. GENERAL ARRANGEMENT.

24-4. Aircraft type designation has been positioned in the upper right corner of the horizontal illustration for rapid identification. Additional aids to rapid orientation are:

a. Recent technological advances in aviation have caused concern for the modern firefighter. Aircraft hazards, cabin configurations, airframe materials, and any other information that would be helpful in fighting fires, the locating and rescue of personnel will be added as the information becomes available.

b. Suggested special tools/equipment are listed in the upper left corner, on the Aircraft/Entry page of each listed aircraft.

c. Procedural steps covering emergency/normal entrances, cut-ins, engine/APU shutdown, safetying ejection/escape systems, and aircrew extraction are outlined on the left side of each page with coordinated illustrations on the right.

d. Illustrations located on right side of pages are coordinated with text by numerals and small letters depicting both paragraph and subparagraph on the page.

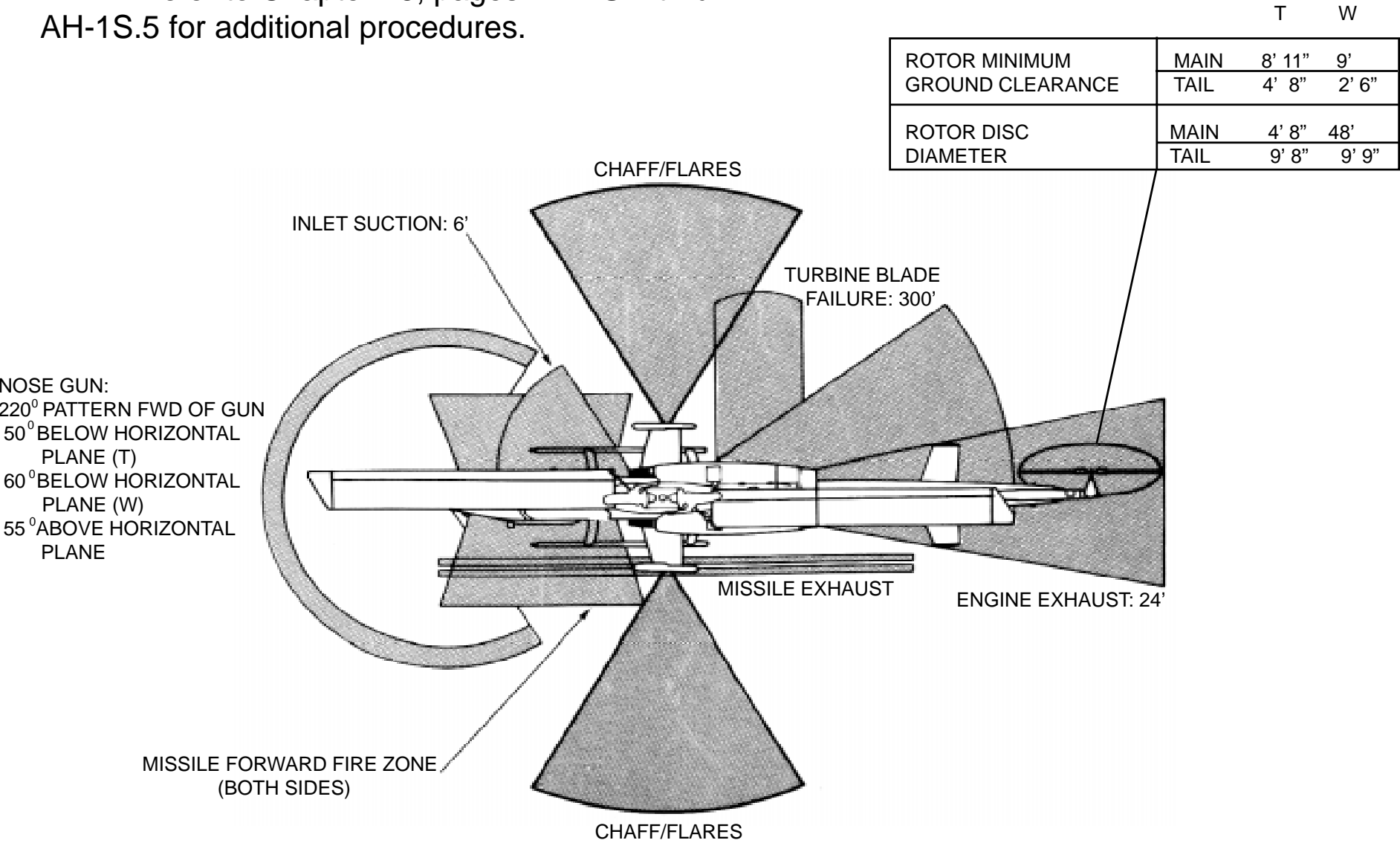
e. Each illustration is consistently colored and/or pattern keyed to highlight essential emergency rescue information.

f. Details are pulled directly from the illustration to highlight an area, thus eliminating unnecessary searching for desired information.

# AIRCRAFT HAZARDS

## NOTE:

The US Navy AH-1 is the similar to the US Army AH-1. Refer to Chapter 13, pages AH-1S.1 thru AH-1S.5 for additional procedures.

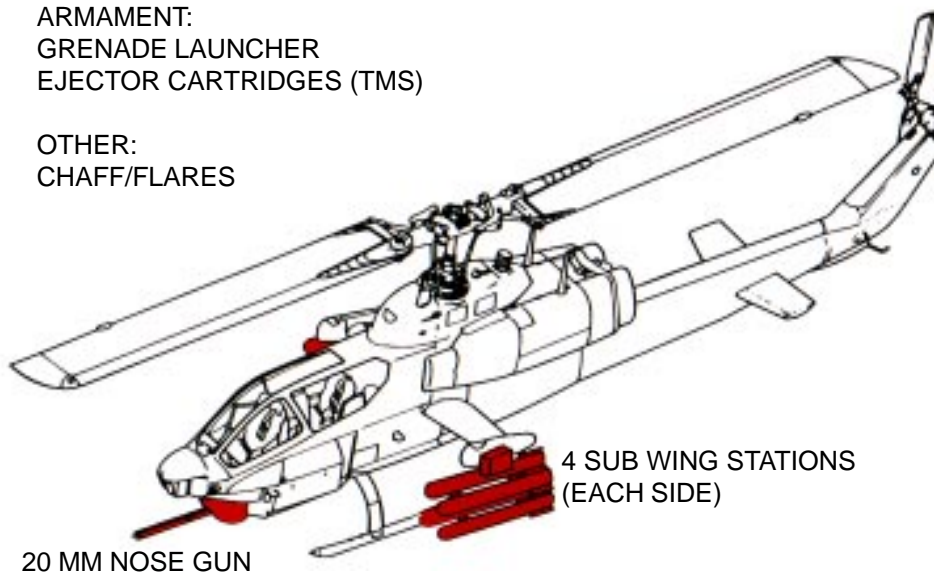


# AIRCRAFT HAZARDS-Continued AND AIRFRAME MATERIALS

AH-1

ARMAMENT:  
GRENADE LAUNCHER  
EJECTOR CARTRIDGES (TMS)

OTHER:  
CHAFF/FLARES



20 MM NOSE GUN

4 SUB WING STATIONS  
(EACH SIDE)


## LEGEND


 ALUMINUM


 STEEL

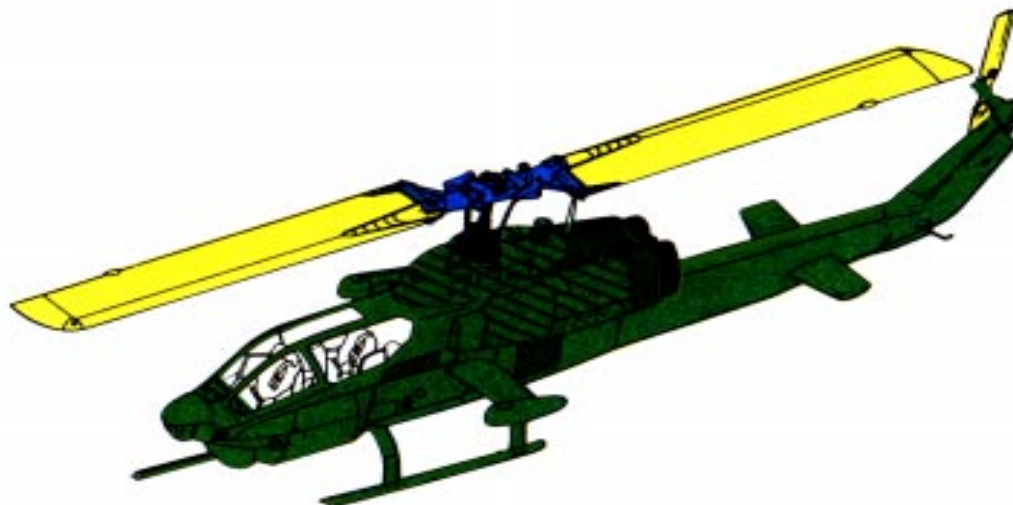
 TITANIUM

 OTHER: FIBERGLASS

 Graphite fabric, covered plastic,  
honeycomb core

 Glass fabric, covered plastic,  
honeycomb core

 Glass fabric covered,  
rigid foam core



**SPECIAL TOOLS/EQUIPMENT**

Power Rescue Saw  
Crash Ax

**AIRCRAFT ENTRY****1. NORMAL ENTRY**

- a. The pilot canopy door opening is on the right side and the co-pilot/gunner door is on the left side. Both doors are pneumatically opened and closed from outside. To open either, turn door handle and it will automatically raise to full open position.

**2. EMERGENCY ENTRY**

- a. The external canopy jettison system is located in the nose of the aircraft. Open access door, remove safety pin from arm/fire mechanism, rotate ring 90° counterclockwise, and pull ring to shatter windows.

**WARNING**

Do not shatter canopies with fuel in cockpit area, fire and explosion may result. Ensure personnel are clear of cockpit area before using jettison system. Personnel within 50 feet of aircraft could be injured by debris when jettison system is used.

**3. CUT-IN/FORCED ENTRY**

- a. Canopies are made of acrylic plastic and may be cut using a power rescue saw or crash ax. Cut along canopy frames.

**4. CANOPY SAFETY****NOTE:**

Canopies have a linear explosive system used to cut the windows from support structure for emergency entrance or exit.

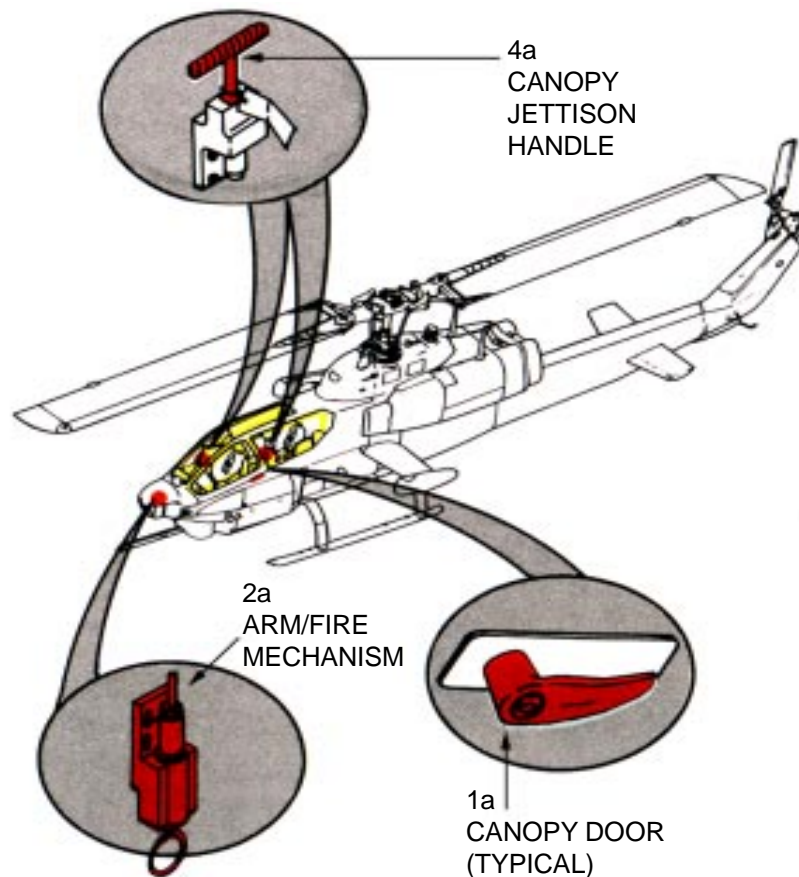
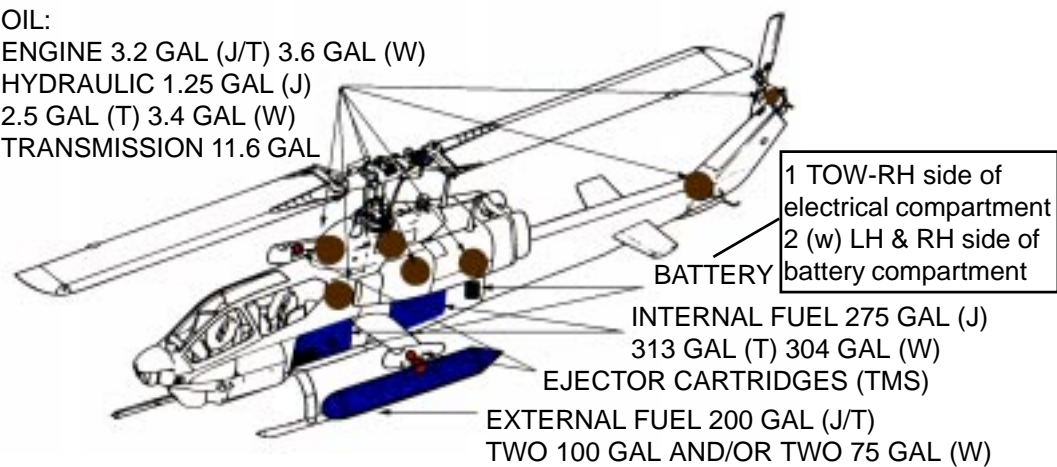
- a. To safety canopy, insert safety pins in pilot's and co-pilot/gunner's canopy jettison handle.

**NOTE:**

Pneumatic system:  
1500 PSI (J)  
3000 PSI (T)  
2000 PSI (W)

**OIL:**

ENGINE 3.2 GAL (J/T) 3.6 GAL (W)  
HYDRAULIC 1.25 GAL (J)  
2.5 GAL (T) 3.4 GAL (W)  
TRANSMISSION 11.6 GAL

**AH-1**

# ENGINE SHUTDOWN

## 1. NORMAL ENGINE SHUTDOWN

- Move idle stop release switch, located on left console, to engine #1 position and close throttle for engine #1 by turning grip to the right. Repeat procedure for engine #2.

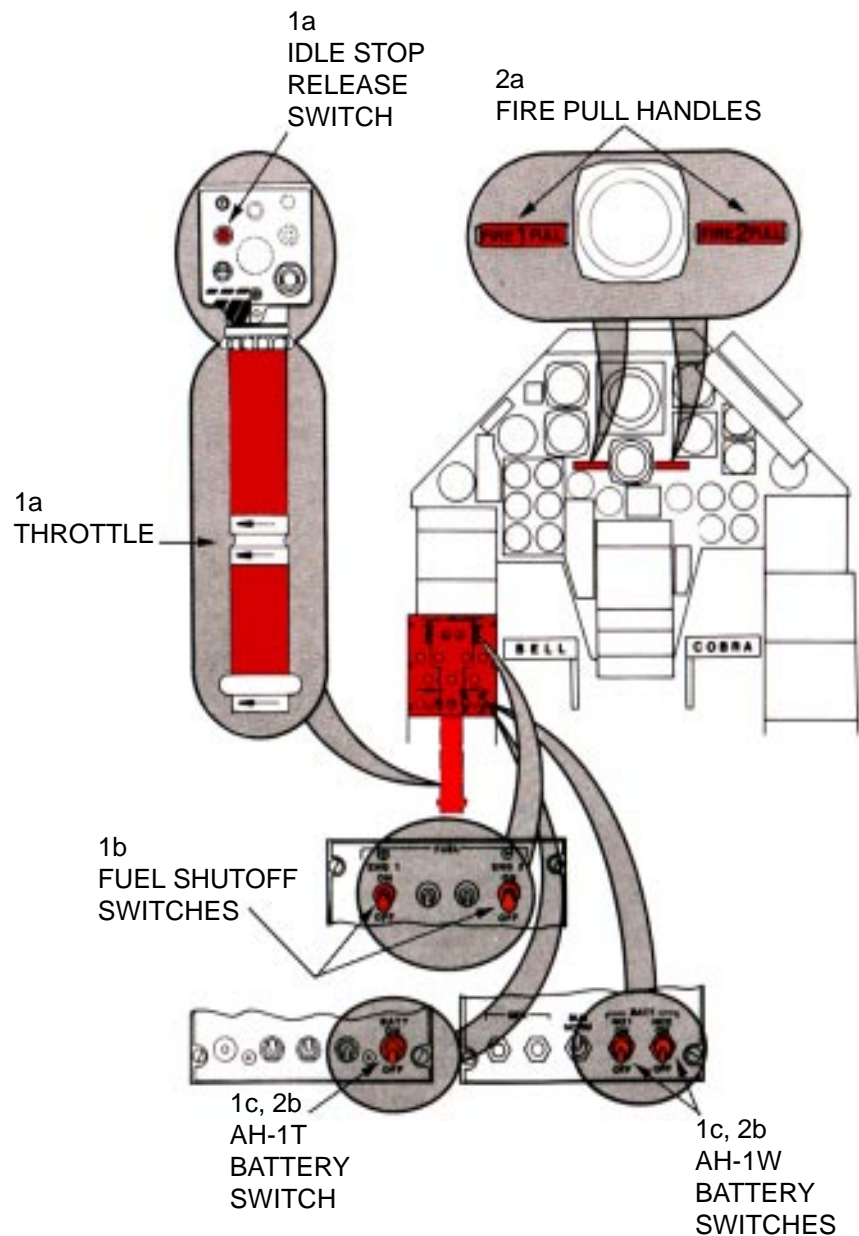
### NOTE:

Close throttle within 5 seconds after actuating idle stop release.

- Place both engine #1 and #2 fuel shutoff switches, located on left console forward of throttle, in OFF position.
- Place battery switch(es), located on left console, in OFF position. See illustration for model designation.

## 2. EMERGENCY ENGINE SHUTDOWN

- Pull both #1 and #2 fire pull handles located on center of forward instrument panel.
- Place battery switch(es), located on left console, in OFF position. See illustration for model designation.
- If battery switches are inaccessible, disconnect batteries externally if time and access permits.



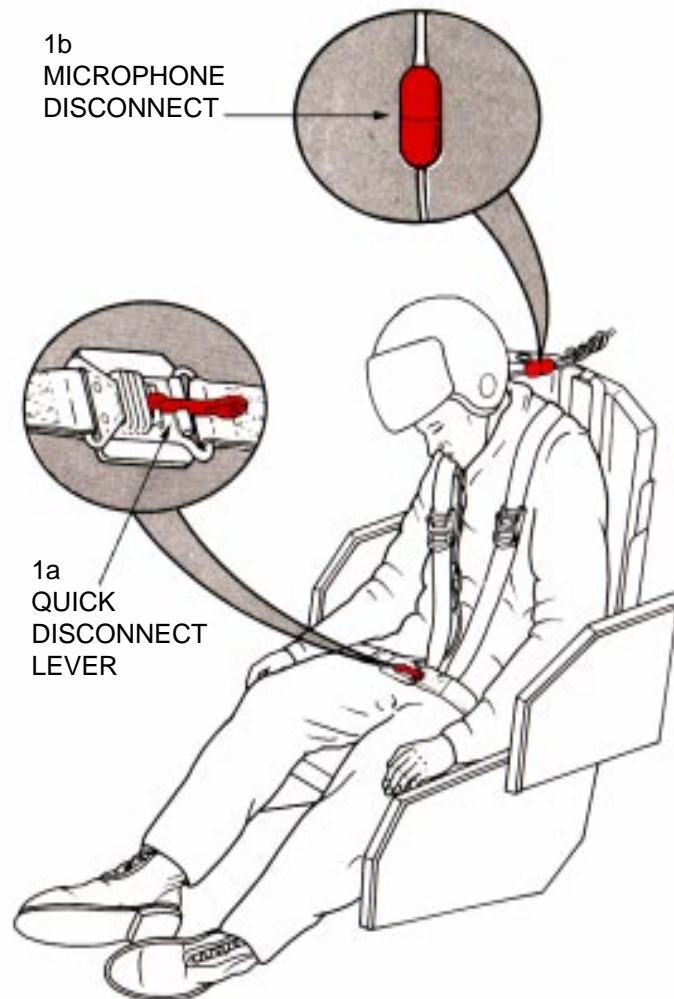
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

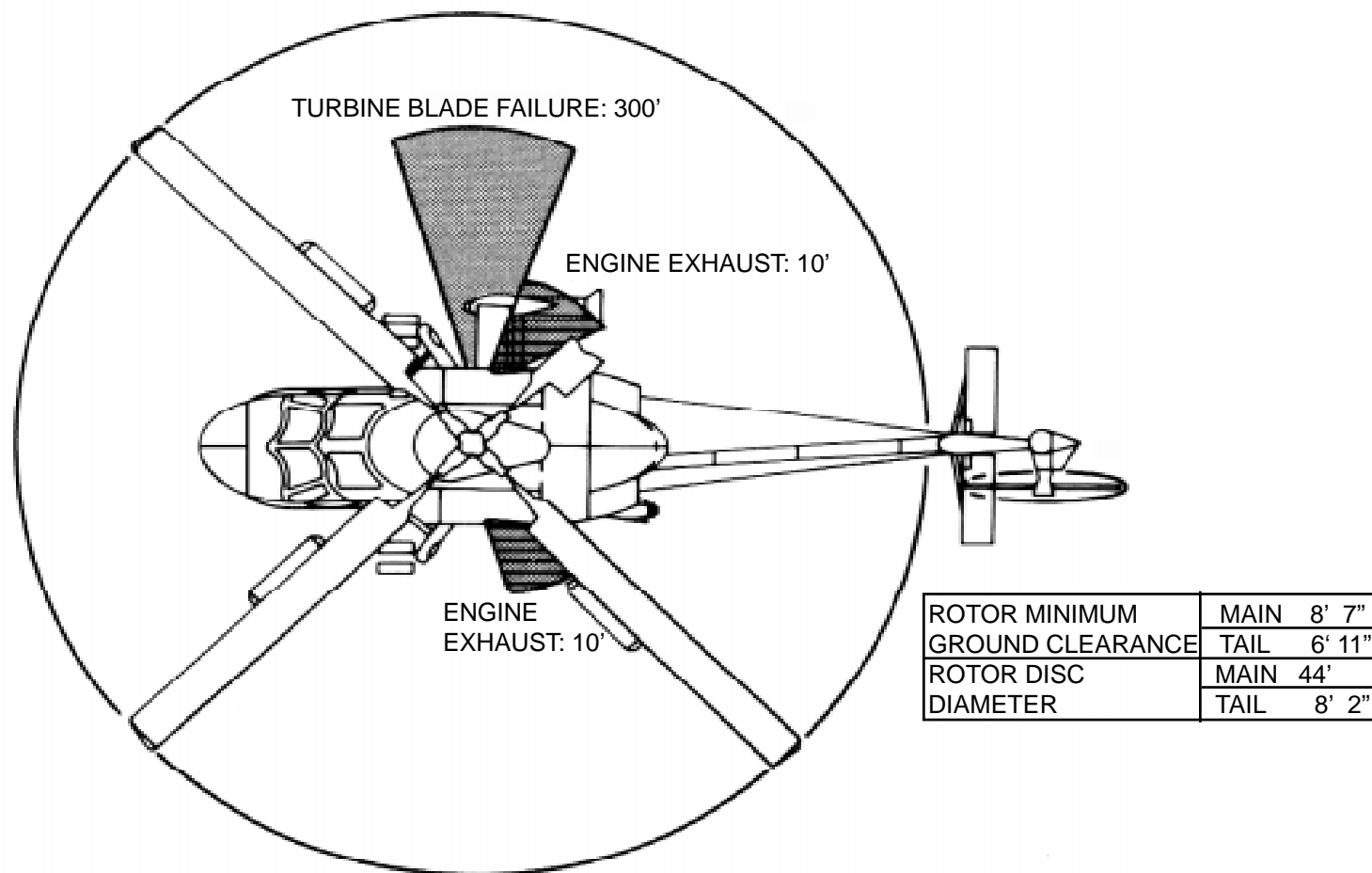
Pilot and co-pilot/gunner are attached to the seats by shoulder harnesses secured to lap belts with quick disconnects.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt.
- b. Disconnect microphone cord, located behind crewmember when leaning forward, prior to lifting crewmember from seat.



## AIRCRAFT HAZARDS

H-2





## AIRCRAFT HAZARDS-Continued AND AIRFRAME MATERIALS

### ARMAMENT:

2 FUSELAGE STATIONS  
MK 25 SMOKE MARKERS  
PASSIVE SONOBUOYS  
ACTIVE SONOBUOYS  
MK 46 TORPEDOES  
CHAFF/FLARES

### LEGEND

	ALUMINUM
	STEEL
	TITANIUM
	OTHER: FIBERGLASS





## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. There are normally two sliding entrance doors; one on the left provides access to the forward cockpit and a large door on the right provides access to the forward cockpit and aft cabin. On HH-2D aircraft, an additional door on the left provides access to aft cabin only.

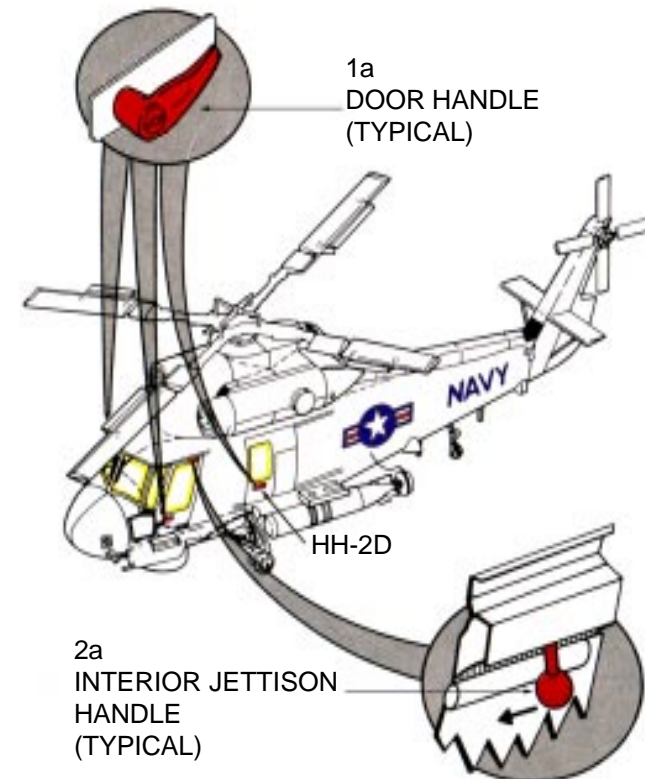
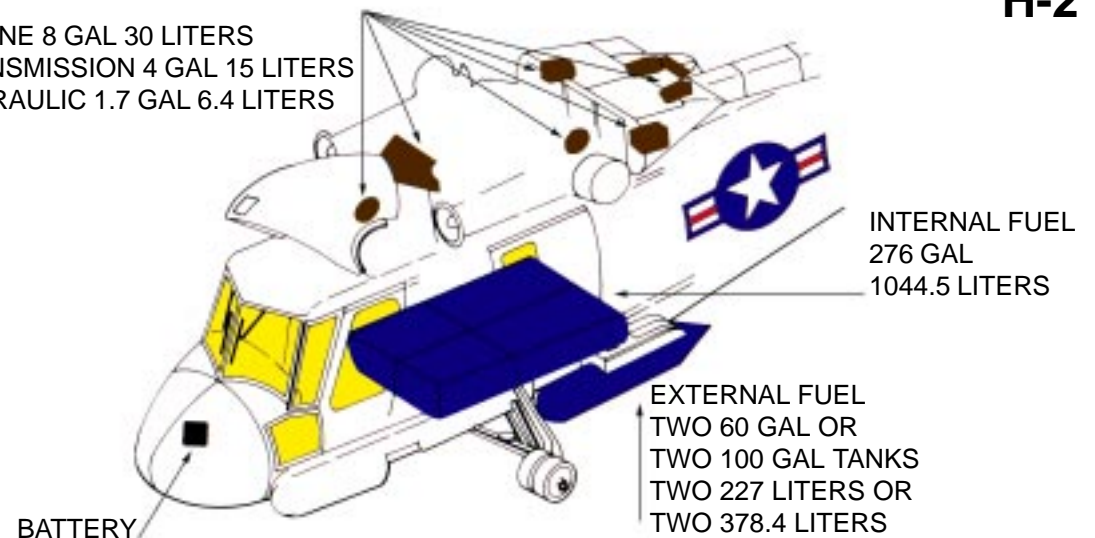
## 2. EMERGENCY ENTRY

- a. Break pilot/co-pilot's windows and push interior jettison handles forward to jettison doors.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut using power rescue saw or crash ax. Cut along window frames and marked fuselage entry areas only.

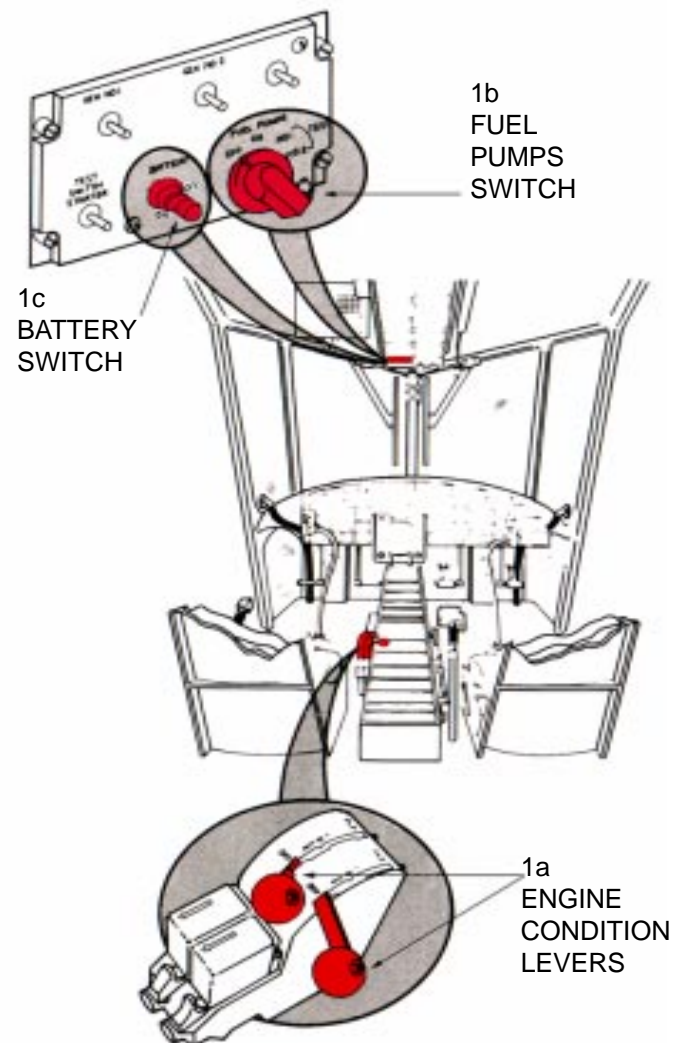
OIL  
ENGINE 8 GAL 30 LITERS  
TRANSMISSION 4 GAL 15 LITERS  
HYDRAULIC 1.7 GAL 6.4 LITERS



## ENGINE SHUTDOWN AND BATTERY DISCONNECT

### 1. ENGINE SHUTDOWN

- a. To shut off engine fuel flow, move engine condition levers, located on center console, to full AFT/OFF position.
- b. Place fuel pumps switch, located on center overhead panel, in OFF position.
- c. Place battery switch, located just left of fuel pumps switch on center overhead panel, in OFF position.



# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

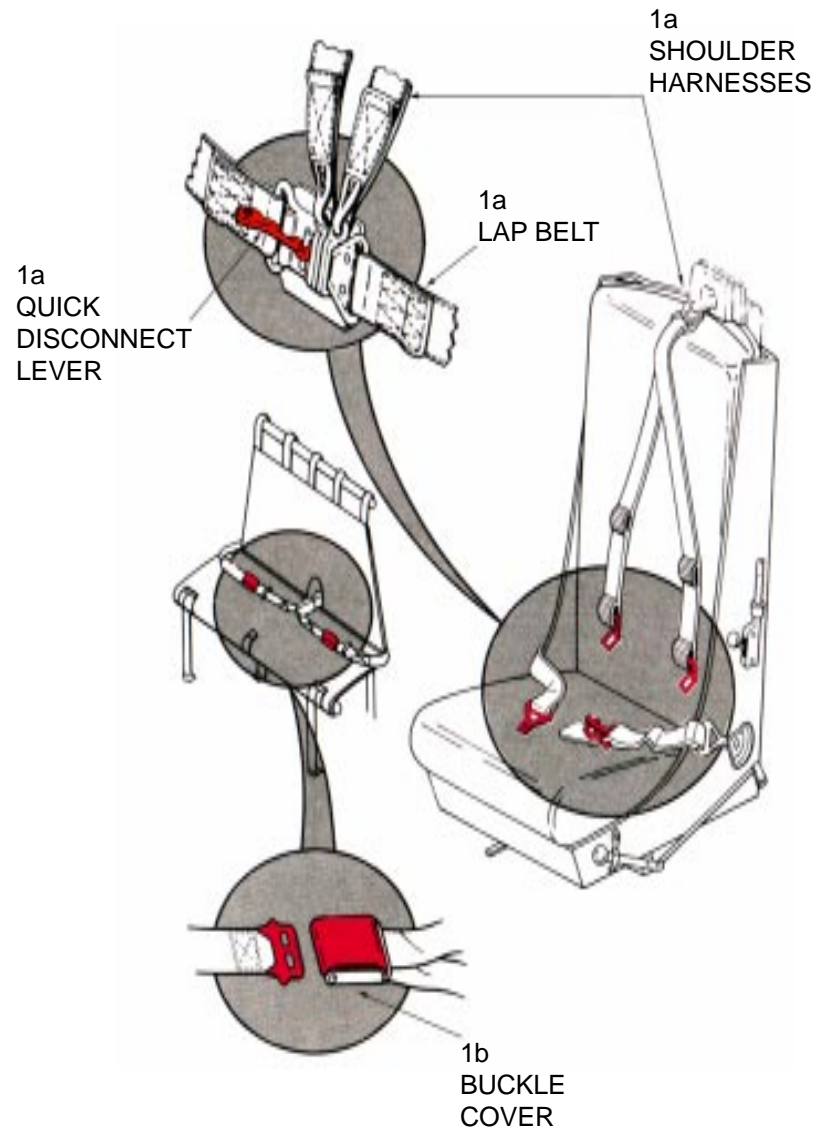
### NOTE:

The pilot, co-pilot, sensor operator, and instructor are attached to the seat by shoulder harnesses secured to the lap belt. Troop/passenger seats in some aircraft compartment configurations have lap belts only.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for crewmembers.
- b. Lift buckle cover to release lap belt from troops/passengers. These are airline types.

### NOTE:

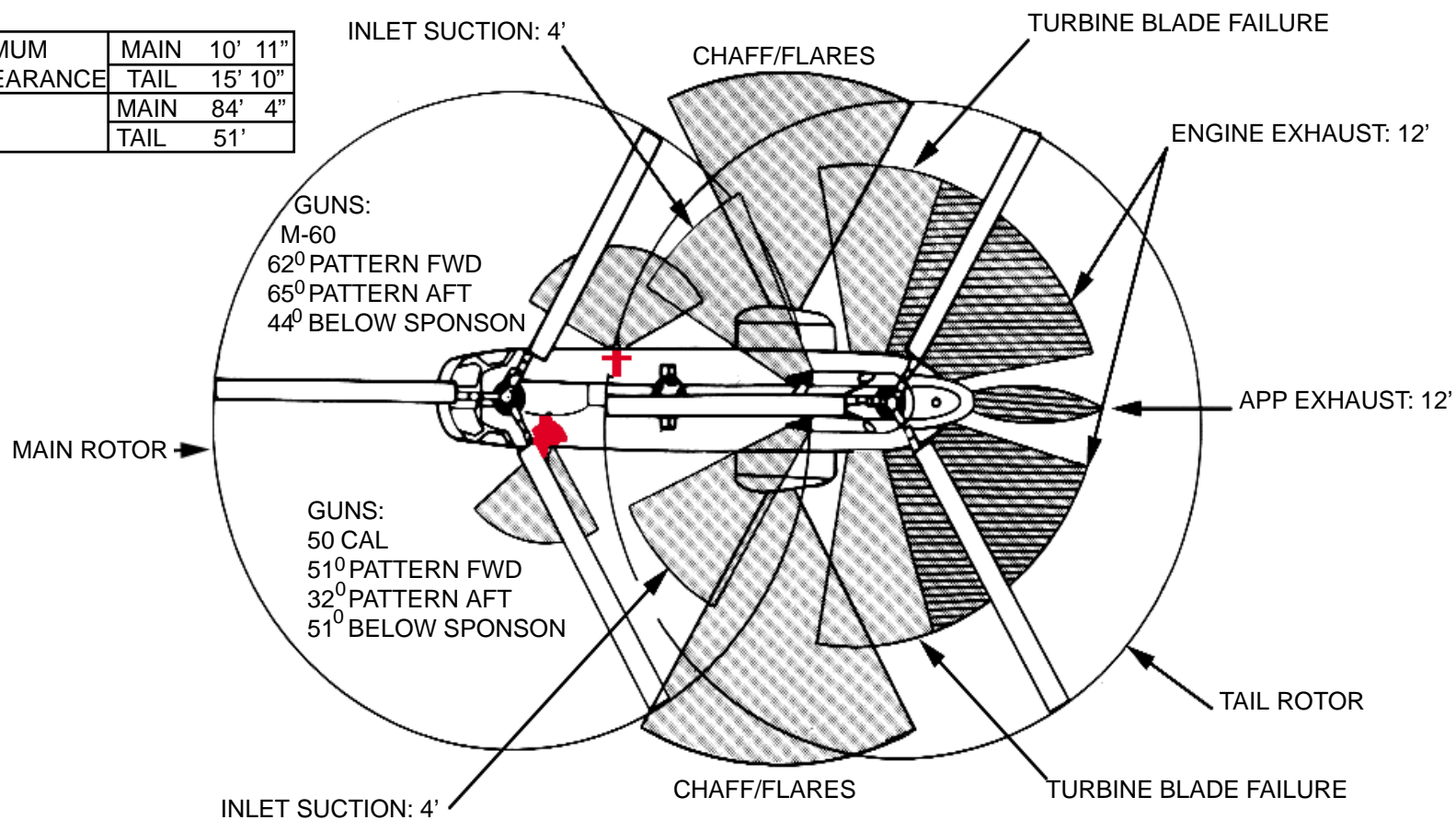
Instructor's seat is not illustrated.



# AIRCRAFT HAZARDS

H-46

ROTOR MINIMUM	MAIN	10' 11"
GROUND CLEARANCE	TAIL	15' 10"
ROTOR DISC	MAIN	84' 4"
DIAMETER	TAIL	51'



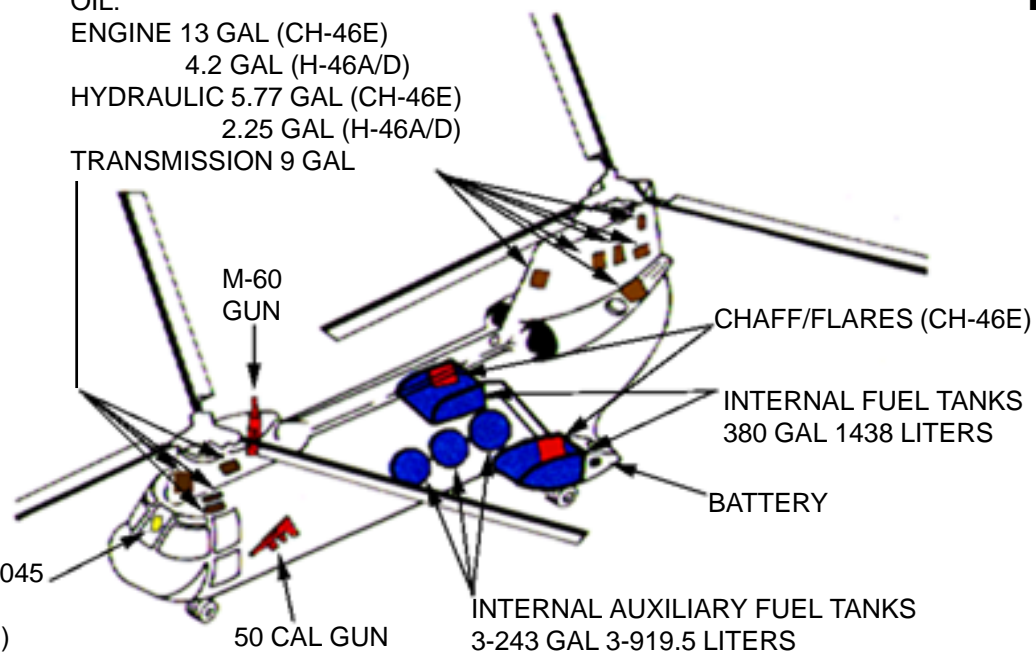
# AIRCRAFT HAZARDS-Continued AND AIRFRAME MATERIALS

H-46

NOTE:  
Pneumatic system  
is 3000 PSI.

OIL:  
ENGINE 13 GAL (CH-46E)  
4.2 GAL (H-46A/D)  
HYDRAULIC 5.77 GAL (CH-46E)  
2.25 GAL (H-46A/D)  
TRANSMISSION 9 GAL

OXYGEN:  
A/C PRIOR TO 154045  
TWO 295 IN<sup>3</sup>  
BOTTLES (CH-46E)



## LEGEND

<span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black;"></span>	ALUMINUM
<span style="display: inline-block; width: 15px; height: 10px; background-color: black; border: 1px solid black;"></span>	STEEL
<span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black;"></span>	TITANIUM
<span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black;"></span>	OTHER: FIBERGLASS





## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. Normal entry is through main cabin door on right side. The door has an upper and lower door which operate separately. To open upper portion, push handle to expose, turn handle clockwise, move door inward slightly and roll up until the uplock is engaged. The lower door opens out and down. To open, push handle, turn handle counterclockwise and pull door out and down.

## 2. EMERGENCY ENTRY

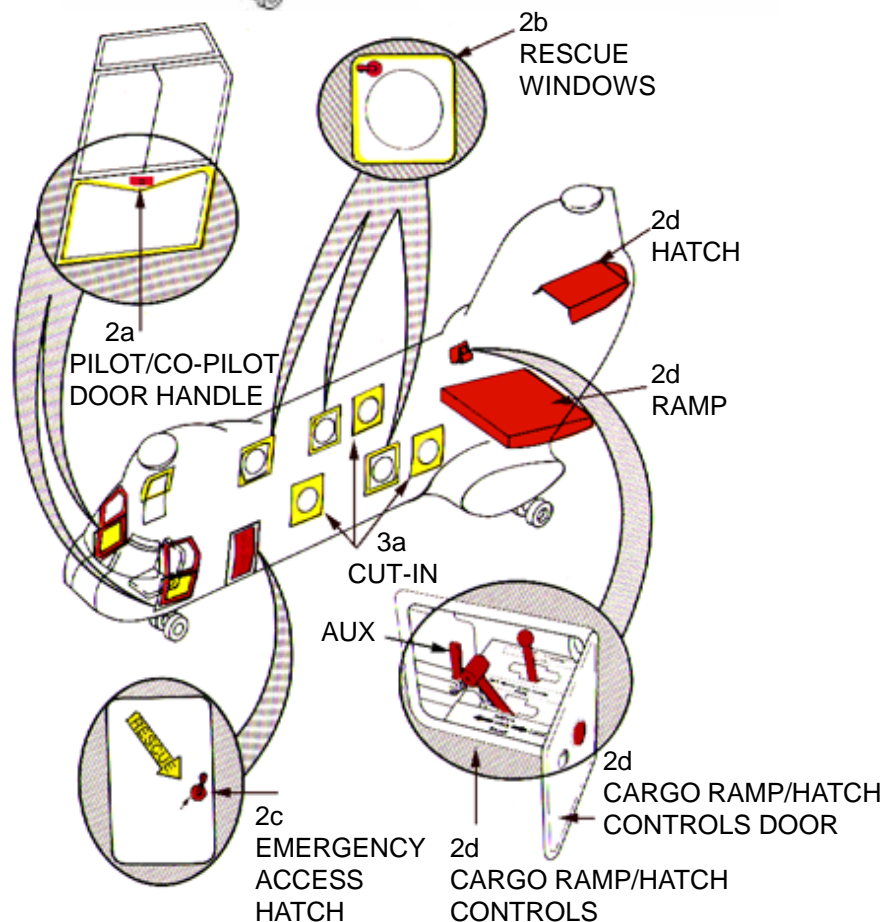
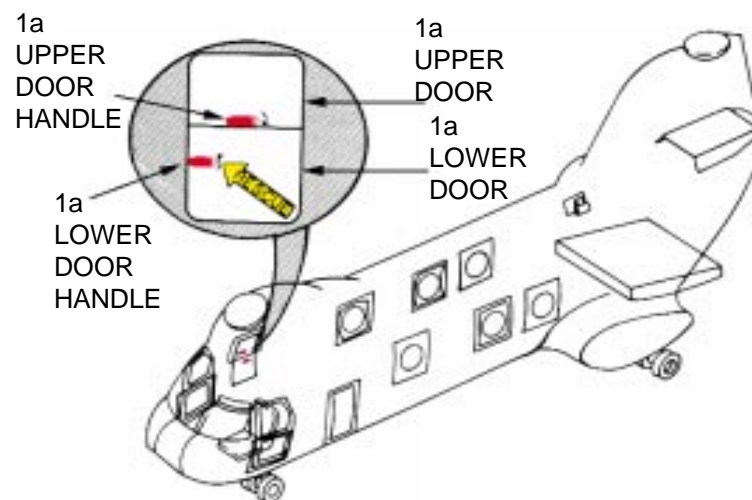
## NOTE:

Emergency entrance may be gained through pilot/co-pilot jettisonable windows, three fuselage windows, the emergency access hatch, and the cargo ramp/hatch.

- a. To open pilot/co-pilot's jettisonable window push handle, turn handle clockwise and pull.
- b. Three windows, two on right side and one on left side are marked rescue. To open, pull tape out (upper left corner of window) the push panel inward.
- c. To open the emergency access hatch (CH-46E left side), also marked rescue, pull tape out and push panel inward.
- d. The cargo ramp/hatch controls are located on right side, above stub wing (rear). To access controls, push button on access door. The system consists of three control levers. With hydraulic pressure, actuate both ramp and hatch by pushing ramp control handle and cargo hatch control handle aft. With hydraulic pressure, only ramp will operate. To lower ramp, push ramp control handle aft then push ramp auxiliary control handle aft.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut or broken. Areas marked on fuselage CUT HERE also may be cut out. Cut along window frames and marked fuselage areas only.





# ENGINE AND APU SHUTDOWN AND BATTERY DISCONNECT

## 1. ENGINE SHUTDOWN

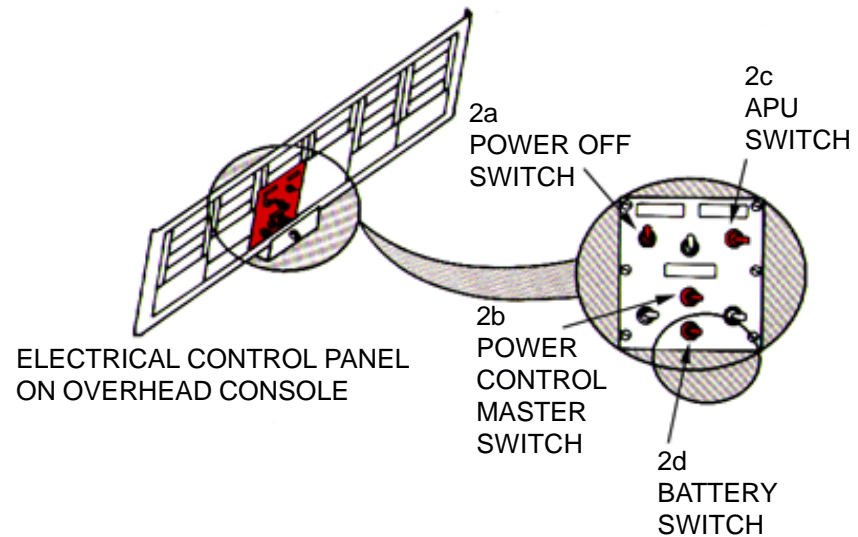
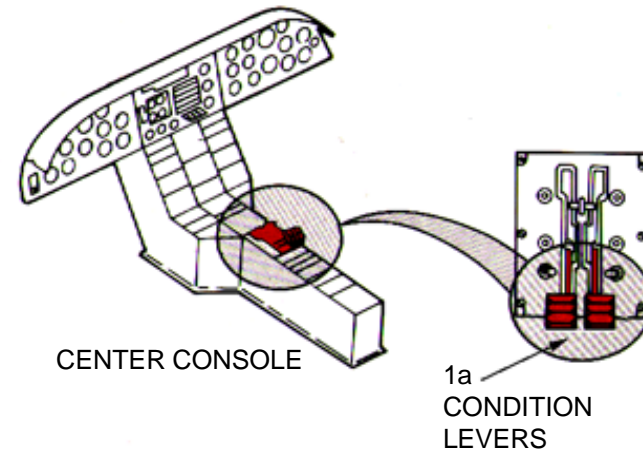
- a. Pull condition levers, located on center console, fully aft to STOP position.

## 2. APU SHUTDOWN

- a. Place the power off switch, located on a electrical control panel on the overhead console, in OFF position.
- b. Place the power control master switch, same location as step 2a, in the OFF position.
- c. Place the APU switch, same location as step 2a, in the STOP position.
- d. Deactivate the electrical system by placing the battery switch, same location as step 2a, in the OFF position.

## 3. BATTERY DISCONNECT

- a. Disconnect the battery, located in the left wheel well, if battery switch can not be accessed on the flight deck, or presents a hazard.



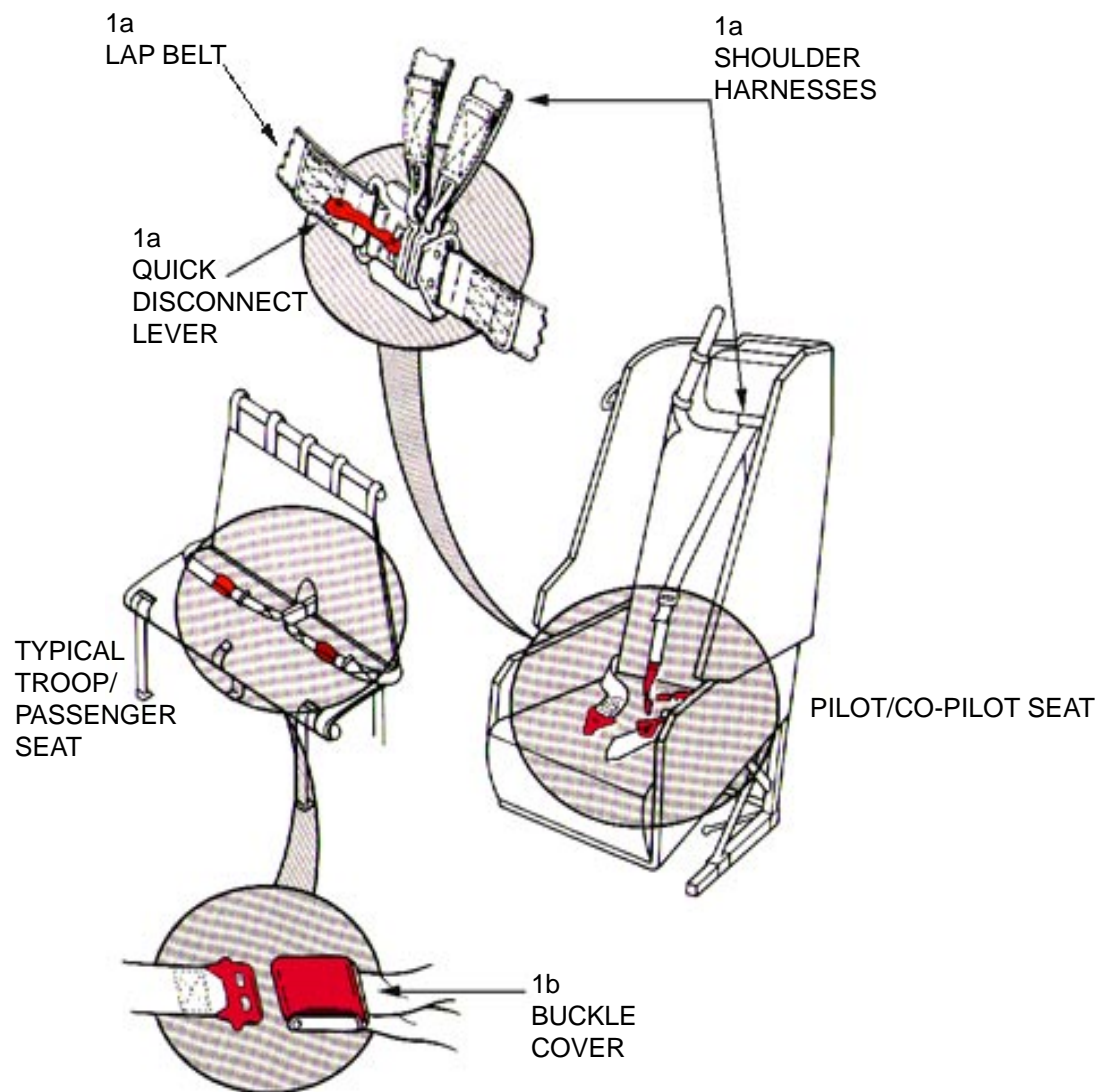
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

The pilot, co-pilot, sensor operator, and instructor are attached to the seat by shoulder harnesses secured to the lap belt. Troop/passenger seats in some aircraft compartment configurations have lap belts only.

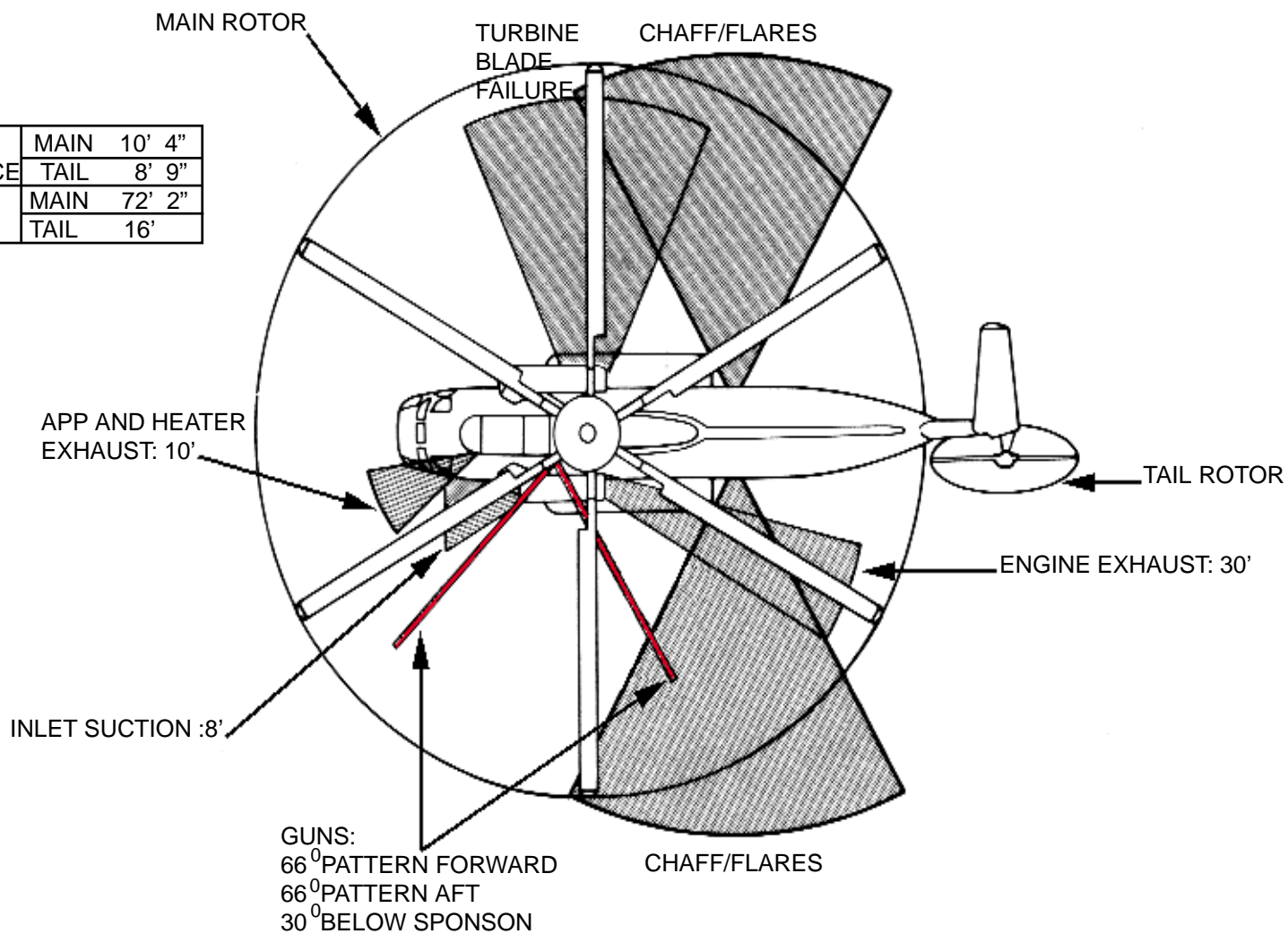
- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for crewmembers.
- b. Lift buckle cover to release lap belt from troops/passengers. These are airline types.



# AIRCRAFT HAZARDS

H-53D

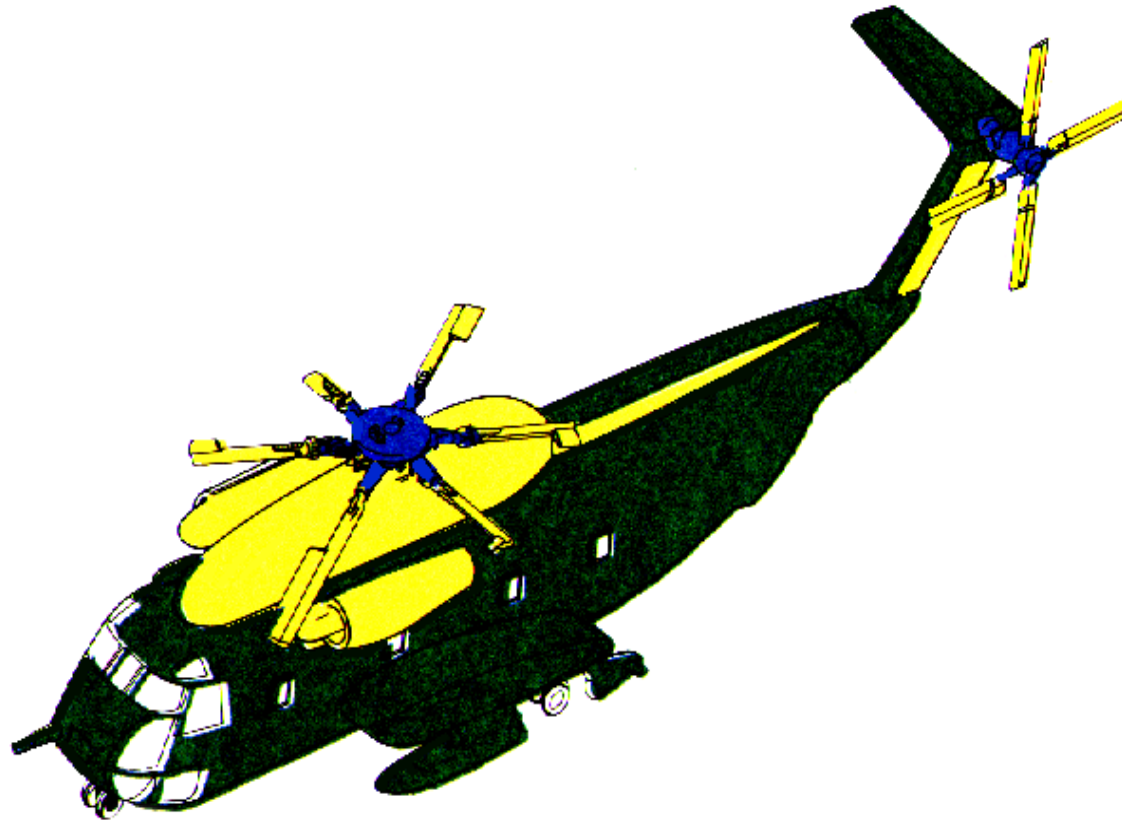
ROTOR MINIMUM GROUND CLEARANCE	MAIN	10' 4"
	TAIL	8' 9"
ROTOR DISC DIAMETER	MAIN	72' 2"
	TAIL	16'



# AIRFRAME MATERIALS

## LEGEND

- ALUMINUM
- STEEL
- TITANIUM
- OTHER: FIBERGLASS

**H-53D**

## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. The upper half of personnel door may be opened from outside by pressing button and turning handle counterclockwise. Push upper half up to cabin ceiling and turn handle counterclockwise to lock in OPEN position. The lower half of personnel door opens down. Push button, turn handle counterclockwise and pull.

## 2. EMERGENCY ENTRY

- a. The pilot/co-pilot's compartment window may be opened by pressing button and turning handle.
- b. The cabin emergency escape hatch (left forward side of cabin) may be opened by pressing button, turning handle counterclockwise and pushing inward.
- c. Upper half of personnel door may be jettisoned by turning handle and pull outward.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut or broken. Areas marked on fuselage CUT HERE also may be cut for access. Cut along window frames and marked fuselage areas only.

OIL:  
 ENGINES 8.04 GAL  
 HYDRAULIC 6.5 GAL  
 TRANSMISSION 22.5 GAL

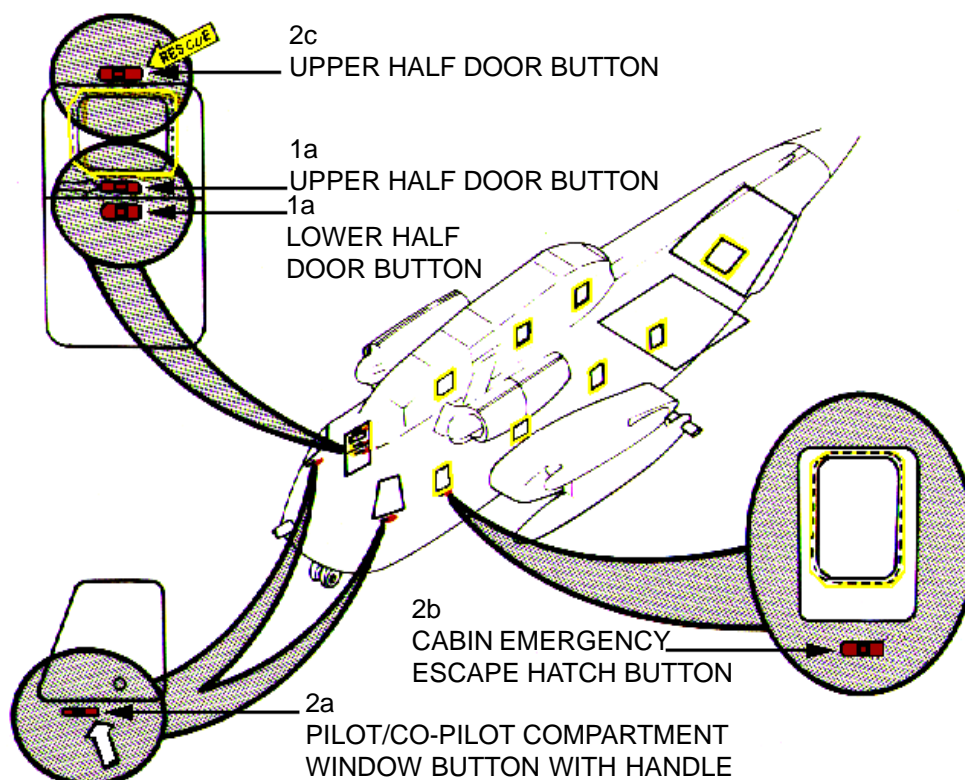
NOTE:  
 Pneumatic system  
 is 3000 PSI.

NOTE:  
 There are two  
 external fuel  
 tank ejector  
 cartridges.

TWO 50 CAL GUNS

CHAFF/FLARES

FUEL:  
 INTERNAL 638 GAL 2414 LITERS  
 EXTERNAL 1300 GAL 4919.6 LITERS



H-53D



## ENGINE AND APP SHUTDOWN

### NOTE:

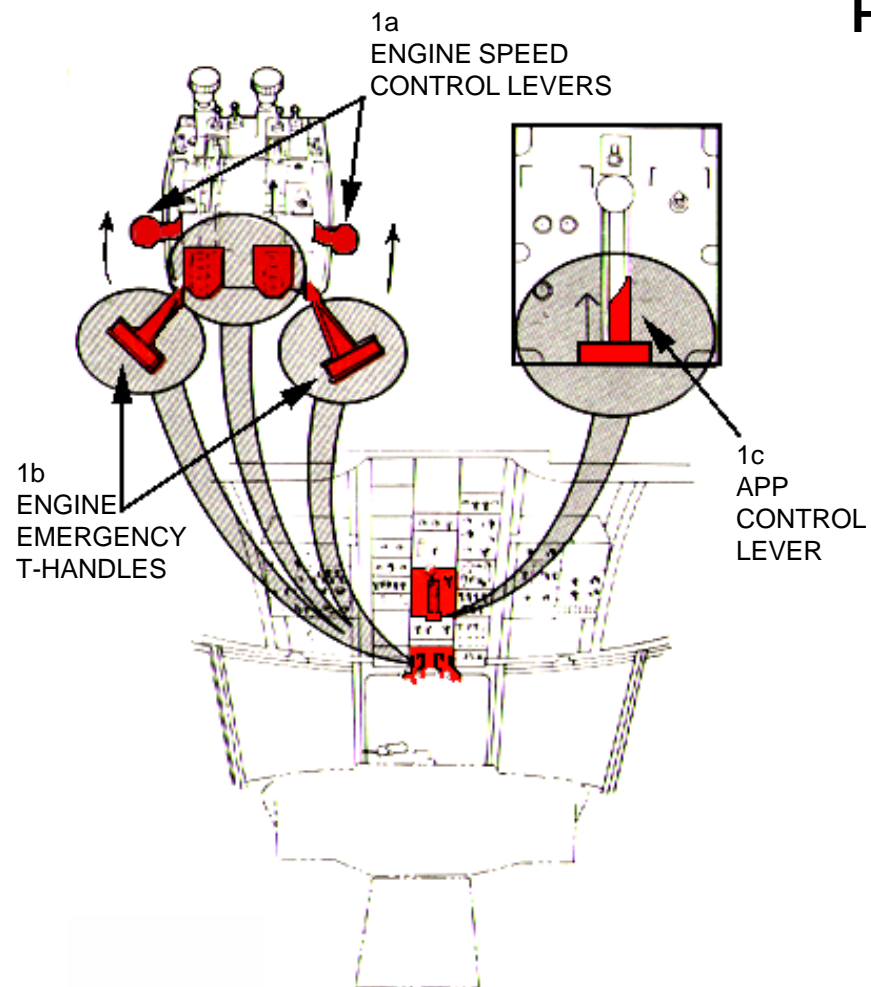
Engine may be shut down by speed control and fuel shutoff or an alternate method by the emergency T-handle.

- a. Pull engine speed control levers, located on center overhead panel, fully aft to SHUTOFF position.
- b. Pull engine emergency T-handles, located on center overhead panel, fully aft. Fuel valves will close.

### NOTE:

If only emergency T-handles are used, the engines will continue to run for up to 2 minutes before fuel starvation effects a shutdown.

- c. Pull auxiliary power plant (APP) control lever, located on center overhead panel, fully aft if the system is operating.

**H-53D**



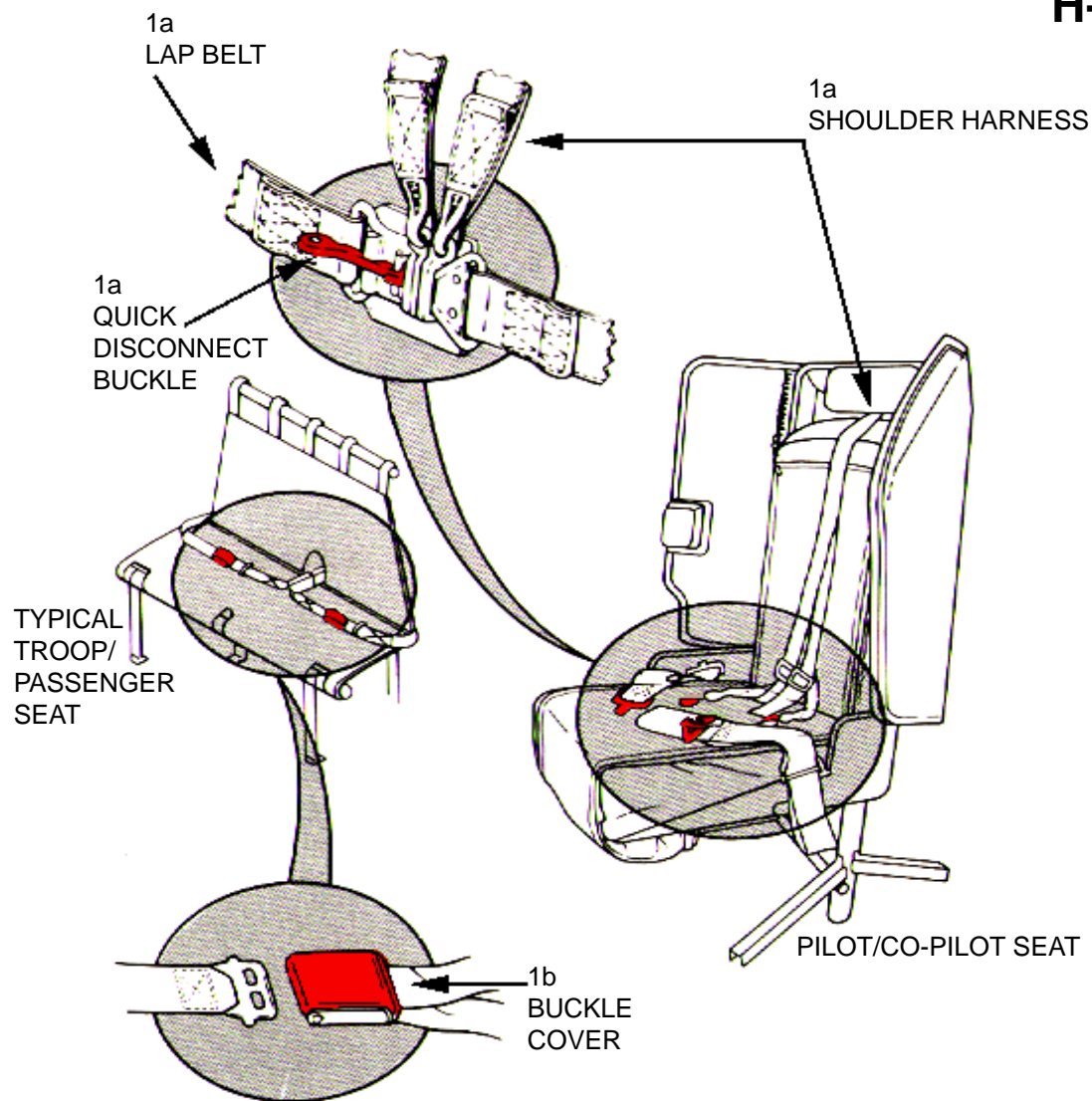
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

The pilot and co-pilot are attached to the seats by shoulder harnesses secured to the lap belt equipped with a quick disconnect buckle. Troop/passenger seats have lap belts only.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for crewmembers.
- b. Lift buckle cover to release lap belt from troops/passengers. These are airline types.

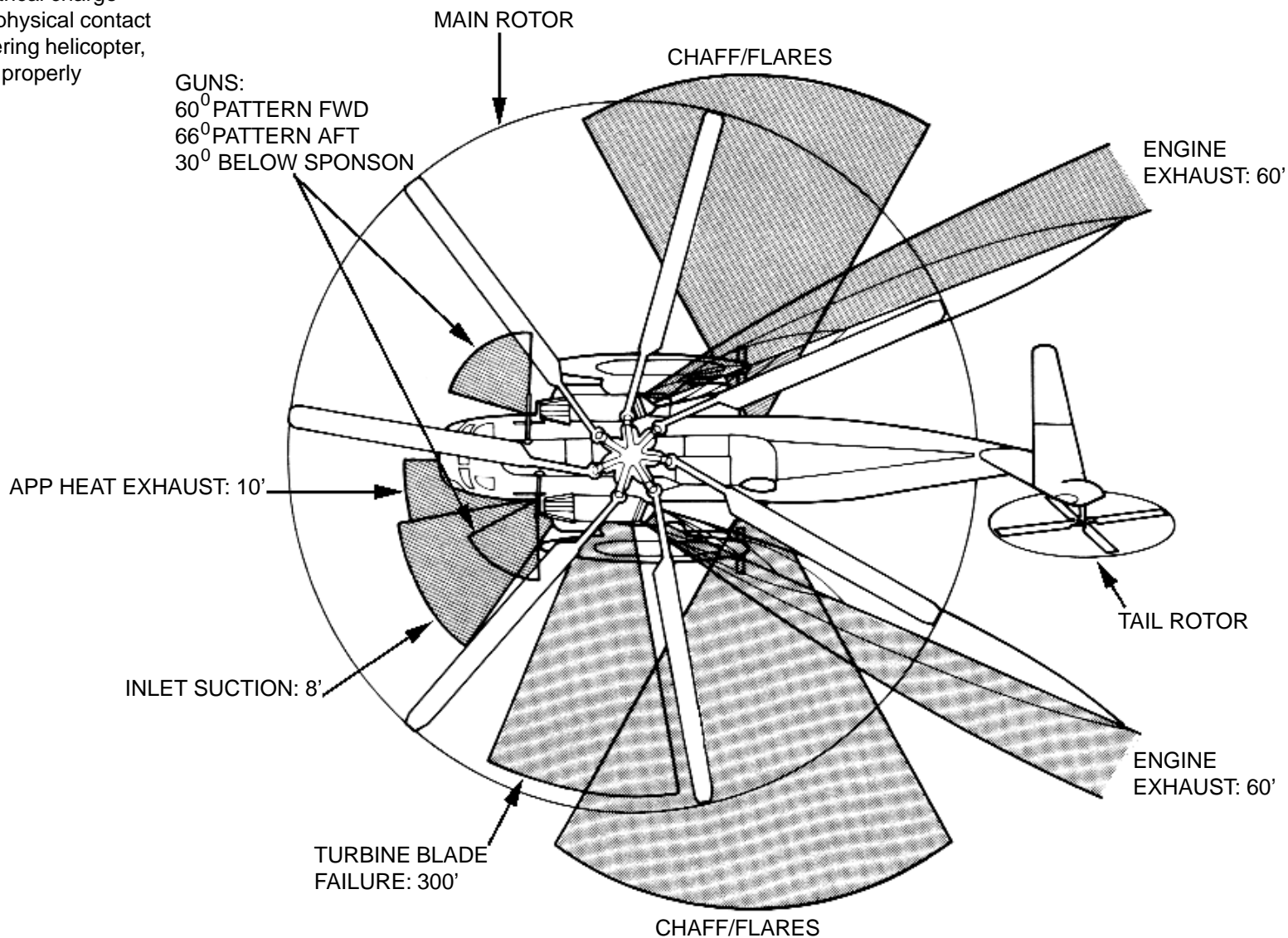
**H-53D**

# AIRCRAFT HAZARDS

## WARNING

Contact with a hovering C/MH-53E may result in injury or death of ground personnel. The C/MH-53E generates an extreme static electrical charge while in flight; prior to physical contact with any part of a hovering helicopter, the helicopter shall be properly grounded.

ROTOR MINIMUM	MAIN	8' 6"
GROUND CLEARANCE	TAIL	8' 6"
ROTOR DISC	MAIN	79'
DIAMETER	TAIL	20'



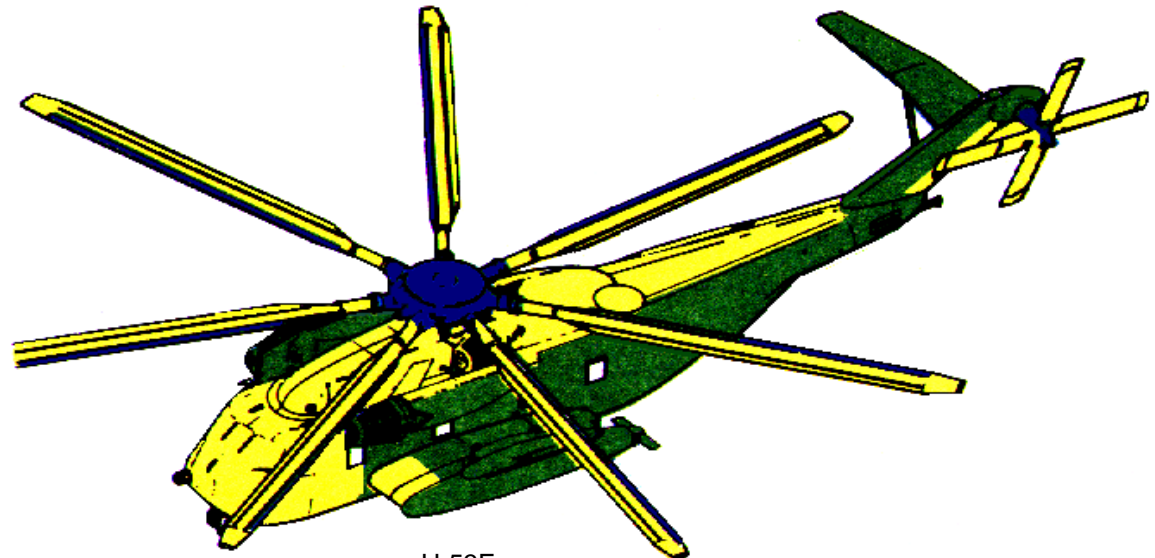
H-53E

# AIRFRAME MATERIALS

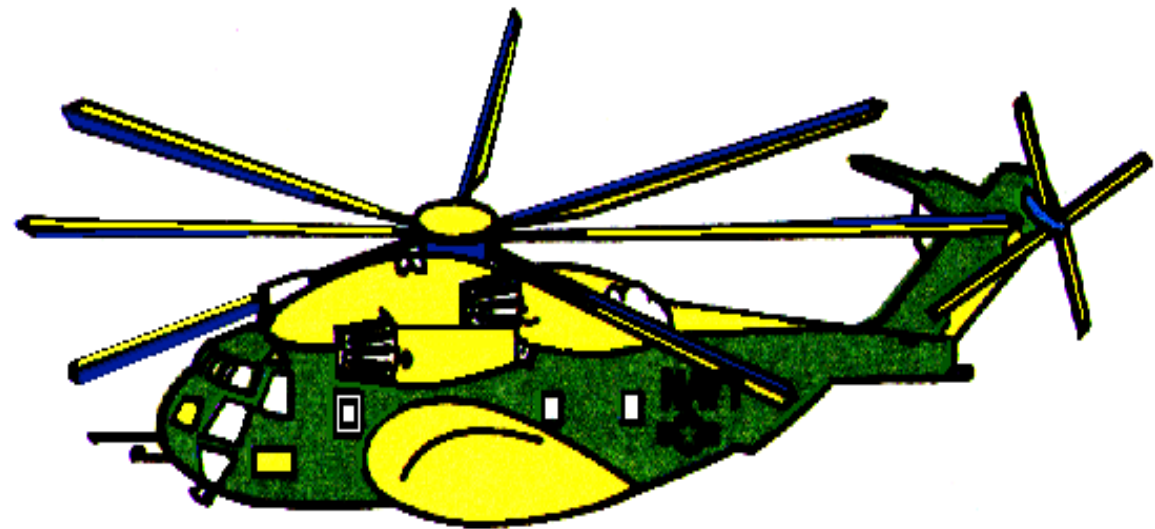
## LEGEND

- ALUMINUM
- STEEL
- TITANIUM
- OTHER: FIBERGLASS/KEVLAR

H-53E



H-53E



CH-53E/MH-53E

## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw  
Crash Ax

GENERAL AIRCRAFT INFORMATION FOR  
H-53E, CH-53E, AND MH-53E MODELS

## NOTE:

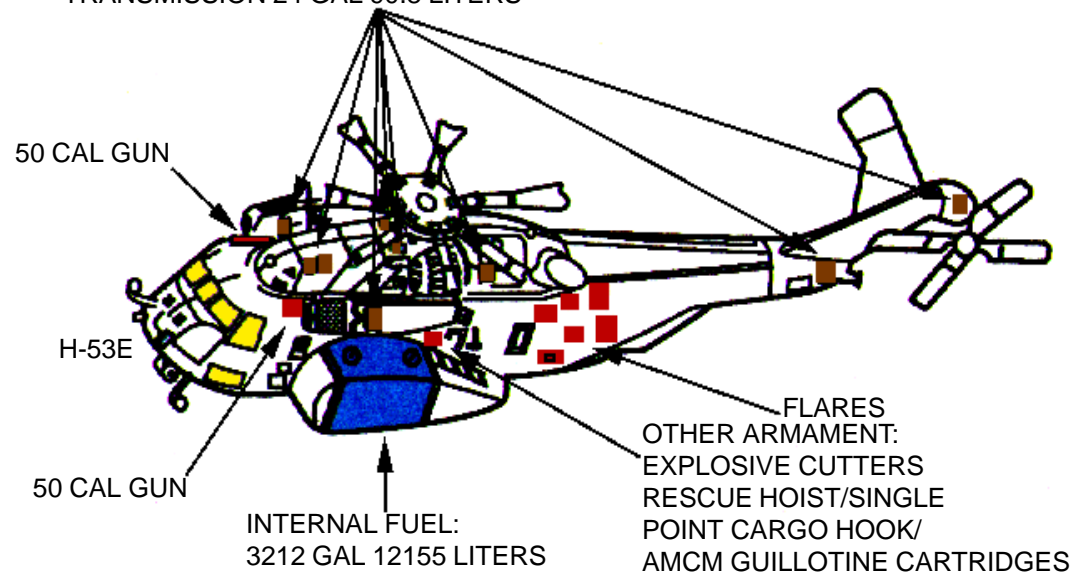
Aircraft may be configured with 0-7  
range extension tanks (314 gallons  
or 1188.3 liters each) in the cabin area.

## NOTE:

Pneumatic system is 3000 PSI for all  
models.

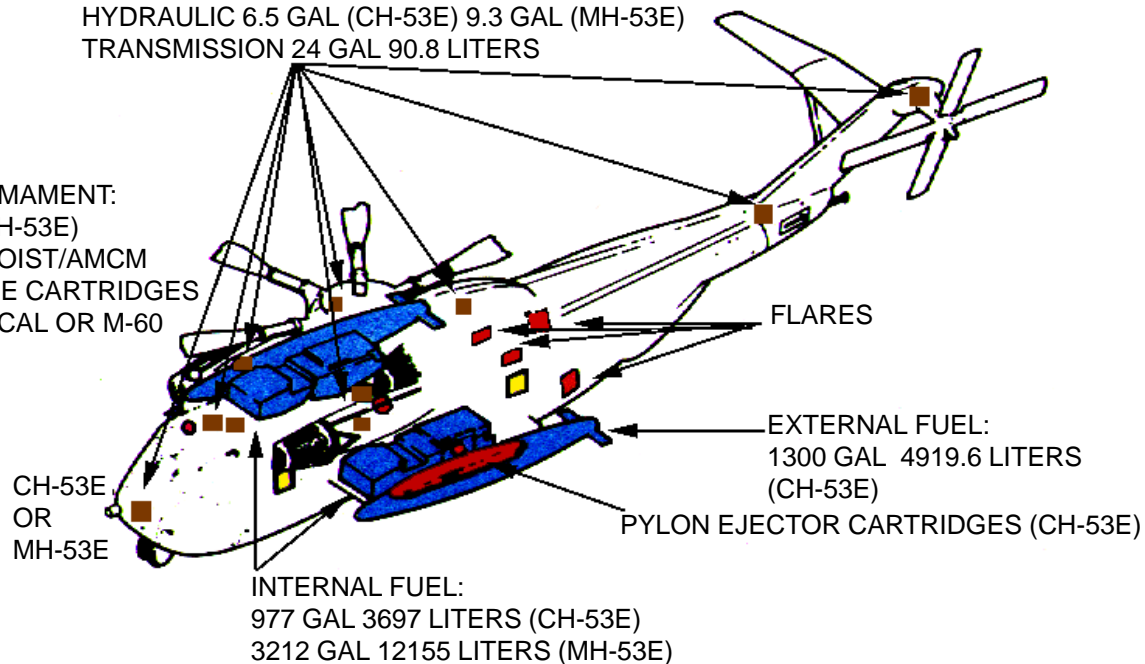
OIL:  
ENGINE 11.67 GAL  
HYDRAULIC 9.3 GAL  
TRANSMISSION 24 GAL 90.8 LITERS

H-53E



OIL:  
ENGINE 11.67 GAL  
HYDRAULIC 6.5 GAL (CH-53E) 9.3 GAL (MH-53E)  
TRANSMISSION 24 GAL 90.8 LITERS

OTHER ARMAMENT:  
MINES - (CH-53E)  
RESCUE HOIST/AMCM  
GUILLOTINE CARTRIDGES  
GUNS - 50 CAL OR M-60



# AIRCRAFT ENTRY

H-53E

## 1. NORMAL ENTRY

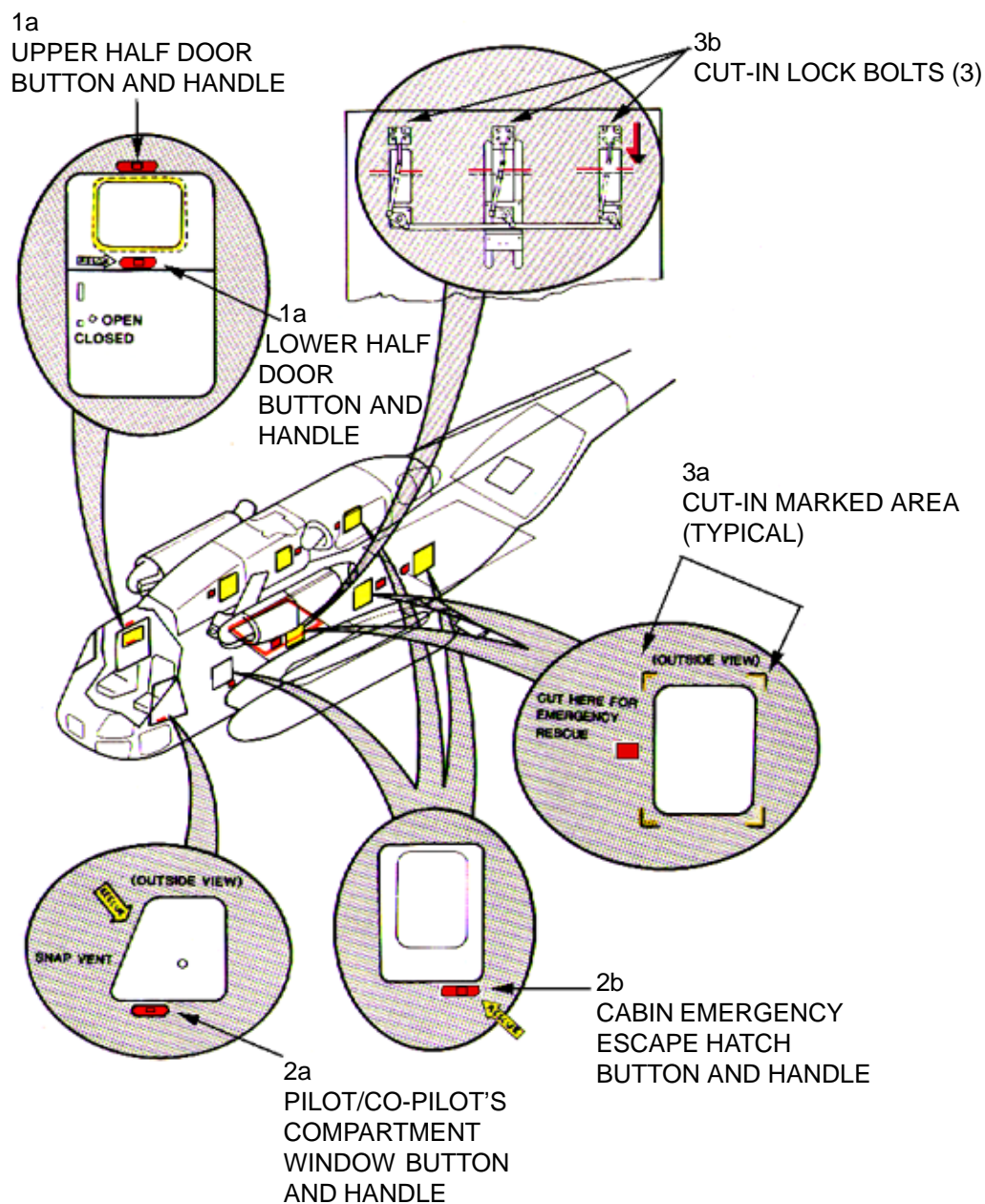
- a. The upper half of personnel door may be opened from outside by pressing button and turning handle counterclockwise. Push upper half up to cabin ceiling and turn handle counterclockwise to lock in OPEN position. The lower half of personnel door swings in to right. Push button, turn handle counterclockwise and push.

## 2. EMERGENCY ENTRY

- a. The pilot/co-pilot's compartment window may be opened. Press button and turn handle.
- b. The cabin emergency escape hatch (left forward cabin) may be opened. Press button, turn handle counterclockwise and push inward.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut or broken. Areas marked on fuselage CUT HERE also may be cut for access. Cut along window frames and marked fuselage areas only.
- b. All CH-53E's have a door in the center of the cabin floor. The door has no external handle, however, entry may be gained by cutting three lock bolts. Once cut, bolts may be pulled out allowing door to be pushed inward.





# ENGINE AND APP SHUTDOWN

H-53E

## 1. ENGINE SHUTDOWN

- a. Pull engine speed control levers, located on overhead panel, down and fully aft to SHUT OFF position.
- b. Pull engine emergency T-handles, located on overhead panel, fully aft to close fuel valves.

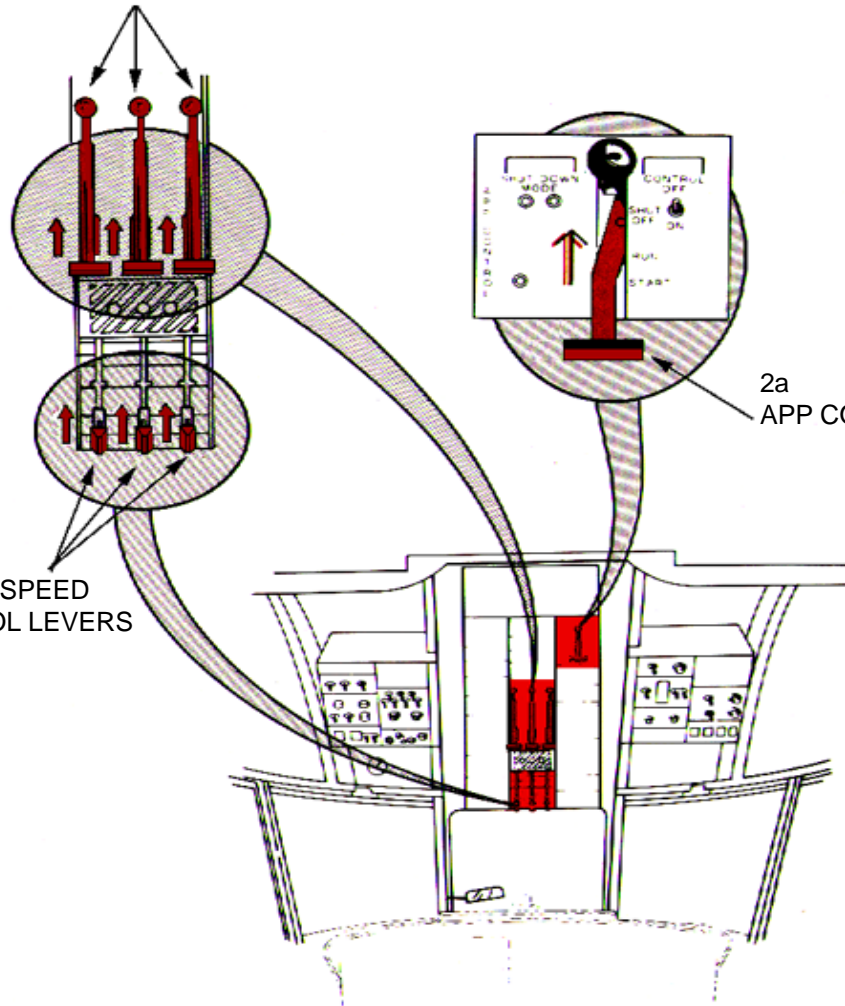
## 2. APP SHUTDOWN

- a. Pull auxiliary power plant (APP) control lever, located on overhead panel, fully aft if system is operating.

1b  
ENGINE EMERGENCY T-HANDLES

1a  
ENGINE SPEED  
CONTROL LEVERS

2a  
APP CONTROL LEVER





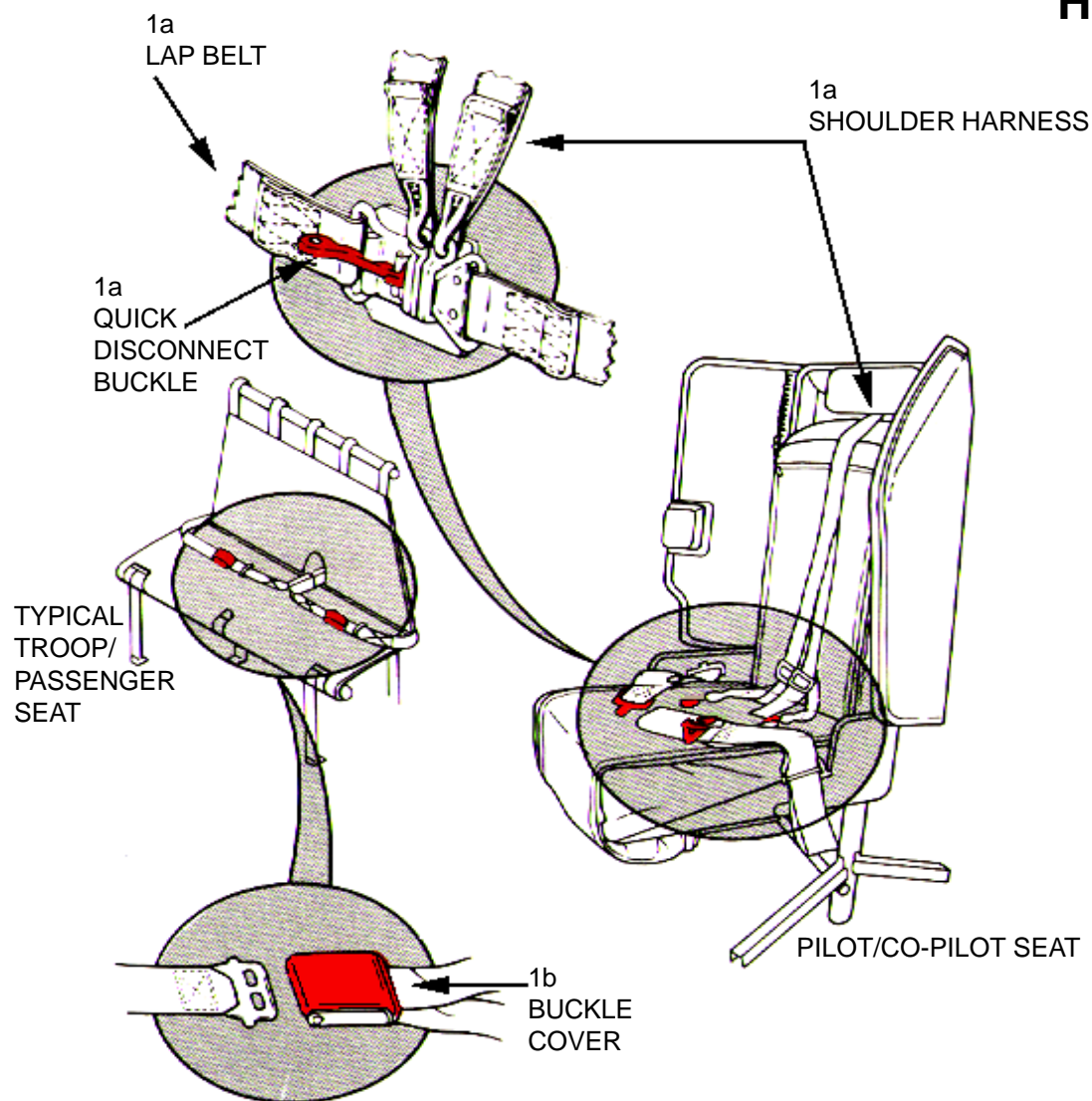
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

The pilot and co-pilot are attached to the seats by shoulder harnesses secured to the lap belt equipped with a quick disconnect buckle. Troop/passenger seats have lap belts only.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for crewmembers.
- b. Lift buckle cover to release lap belt from troops/passengers. These are airline types.

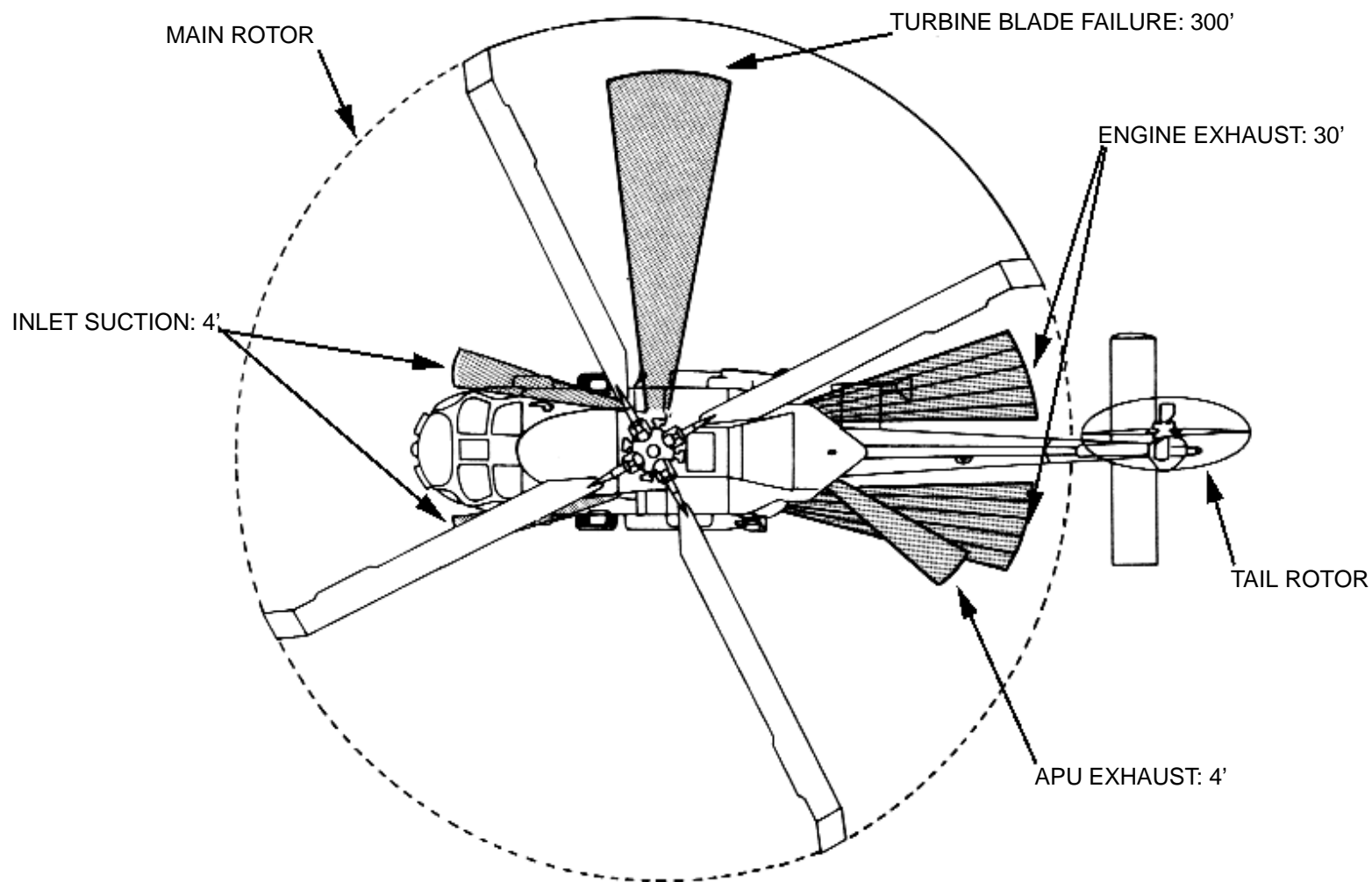
**H-53E**

# AIRCRAFT HAZARDS

## WARNING

Tip of rotor blade may drop as low as 4 feet from ground when turning.

ROTOR MINIMUM GROUND CLEARANCE	MAIN	7' 6"
	TAIL	6' 8"
ROTOR DISC DIAMETER	MAIN	53' 8"
	TAIL	11'

**SH-60**

## AIRCRAFT HAZARDS-Continued

**SH-60****ARMAMENT:**

TORPEDOES (N/A FOR HH-60H/J)

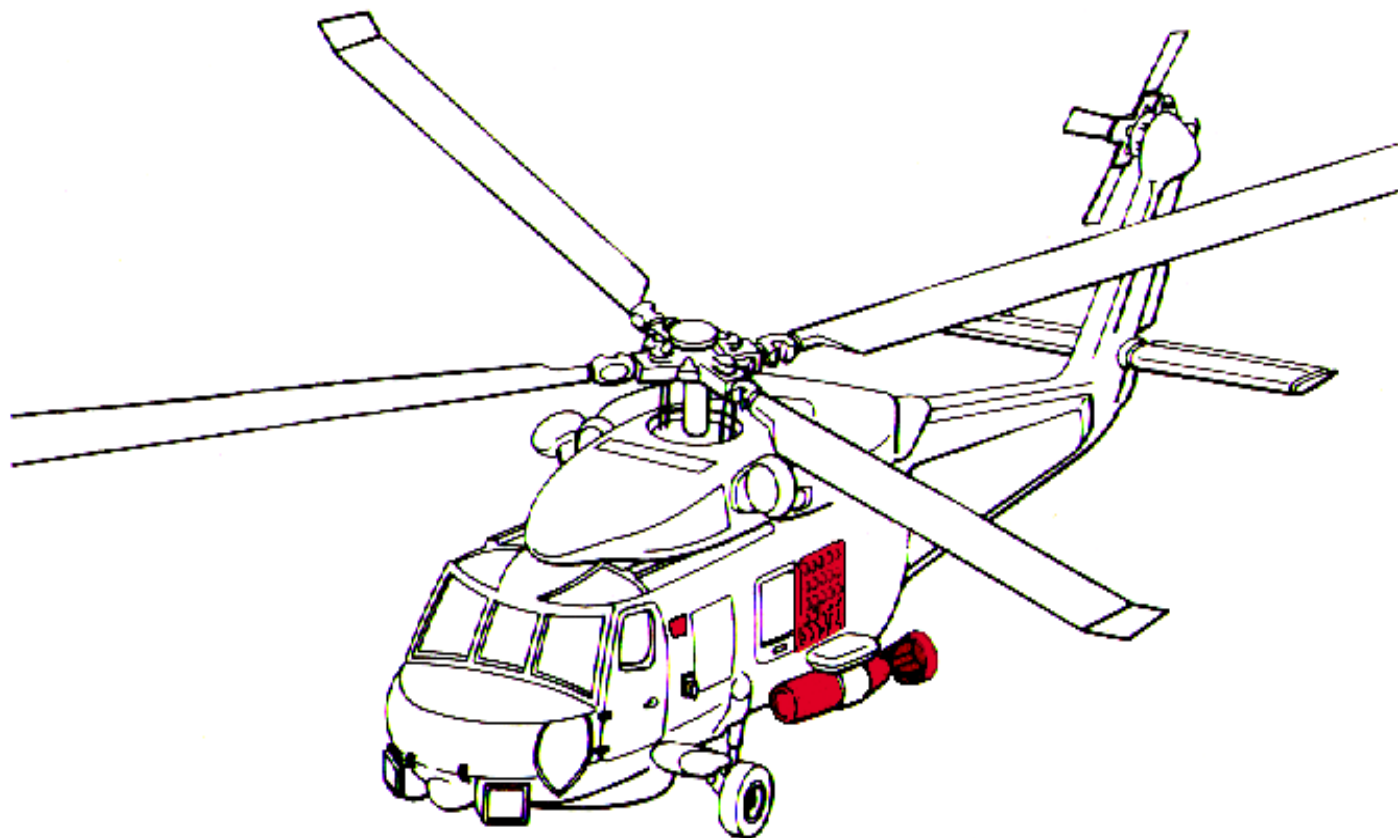
SONOBUOY LAUNCHER

SMOKE MARKERS (PYROTECHNICS)

MK-25 MLM

MK-58 MLM






MK-84 SUS



# AIRFRAME MATERIALS

SH-60

## LEGEND

	ALUMINUM
	STEEL
	TITANIUM
	GRAPHITE EPOXY
	OTHER FIBERGLASS/MAGNESIUM/KEVLAR



## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. Enter the pilot/ATO area through hinged door on each side of cockpit. Pull handle down to open.
- b. A sliding door on right side of fuselage provides access to the cabin. Push to release handle and turn down to open.

## 2. EMERGENCY ENTRY

- a. The pilot and ATO windows, cabin door window and cabin window may be jettisoned by operating the emergency release handle and pulling window out.

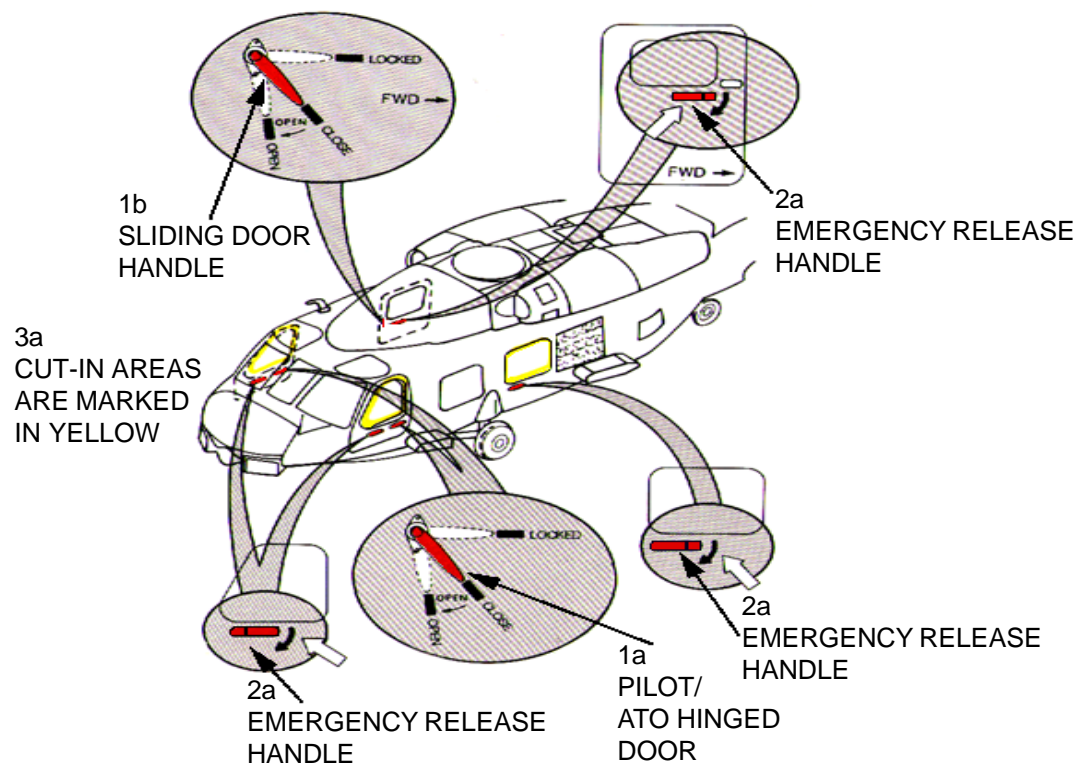
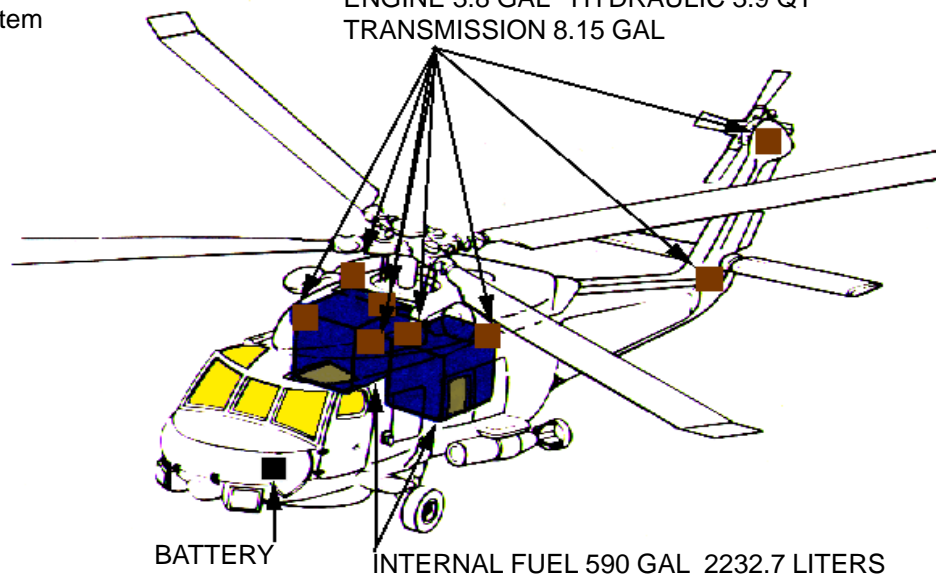
## 3. CUT-IN/FORCED ENTRY

- a. If main entrances are jammed or inoperable, cut around pilot, ATO, and SO windows with power rescue saw or crash ax.

NOTE:  
Pneumatic system  
is 3000 PSI.

OIL:  
ENGINE 3.8 GAL HYDRAULIC 3.9 QT  
TRANSMISSION 8.15 GAL

SH-60



# ENGINE, APU SHUTDOWN AND BATTERY DISCONNECT

SH-60

## 1. ENGINE SHUTDOWN

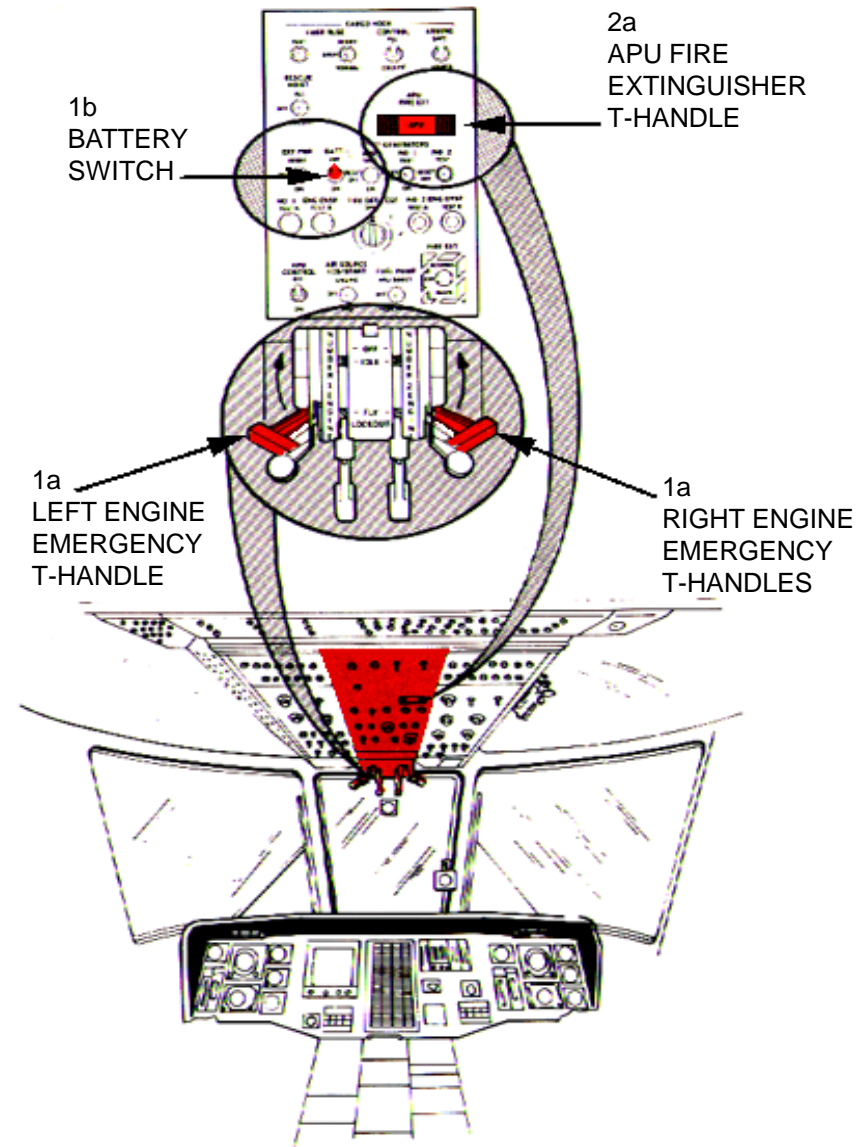
- a. Pull both engine emergency T-handles, located on overhead panel, aft to OFF position.
- b. Place battery switch, located on overhead panel, in OFF position.

## 2. APU SHUTDOWN

- a. Pull APU fire extinguisher T-handle, located on overhead panel. (Required if APU is operating.)

## 3. BATTERY DISCONNECT

- a. To further deactivate the electrical system, disconnect battery quick disconnect fitting. Battery is located in ATO seat well.





# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

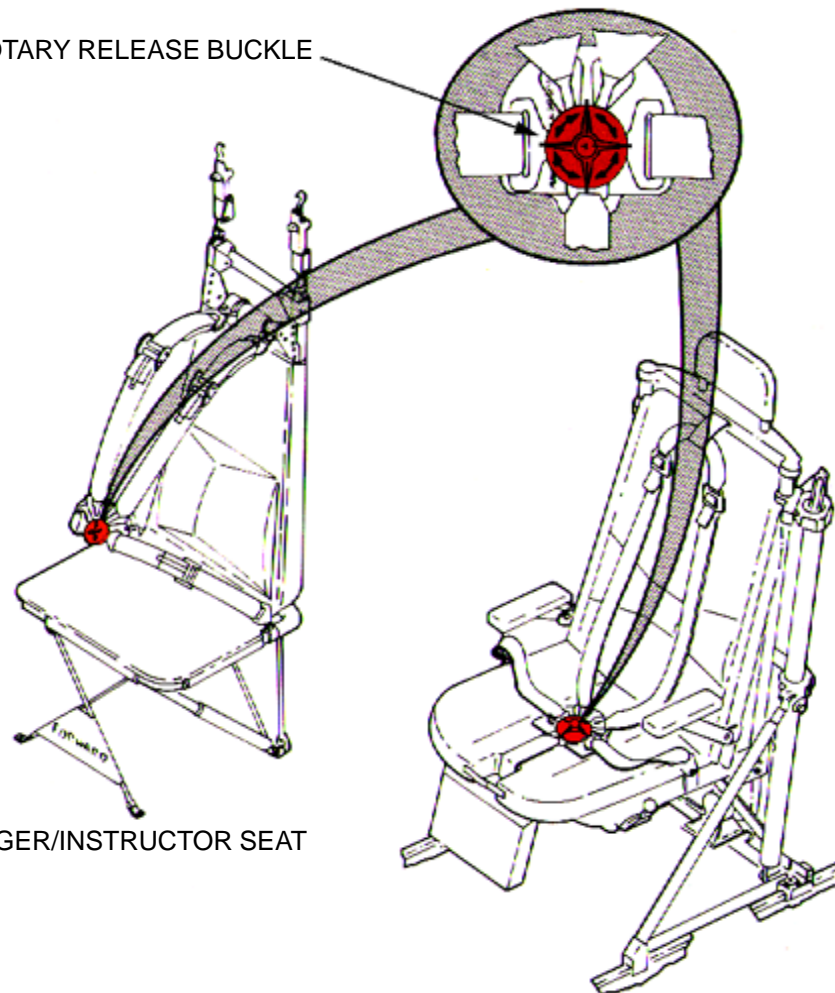
The pilot, co-pilot, crewman, and instructor/passenger are attached to the seats by a complete lap belt and dual torso-restraint shoulder harness attached to a rotary release buckle.

- a. Rotate rotary release buckle in either direction, to release shoulder harnesses and lap belt.

1a  
ROTARY RELEASE BUCKLE

PASSENGER/INSTRUCTOR SEAT

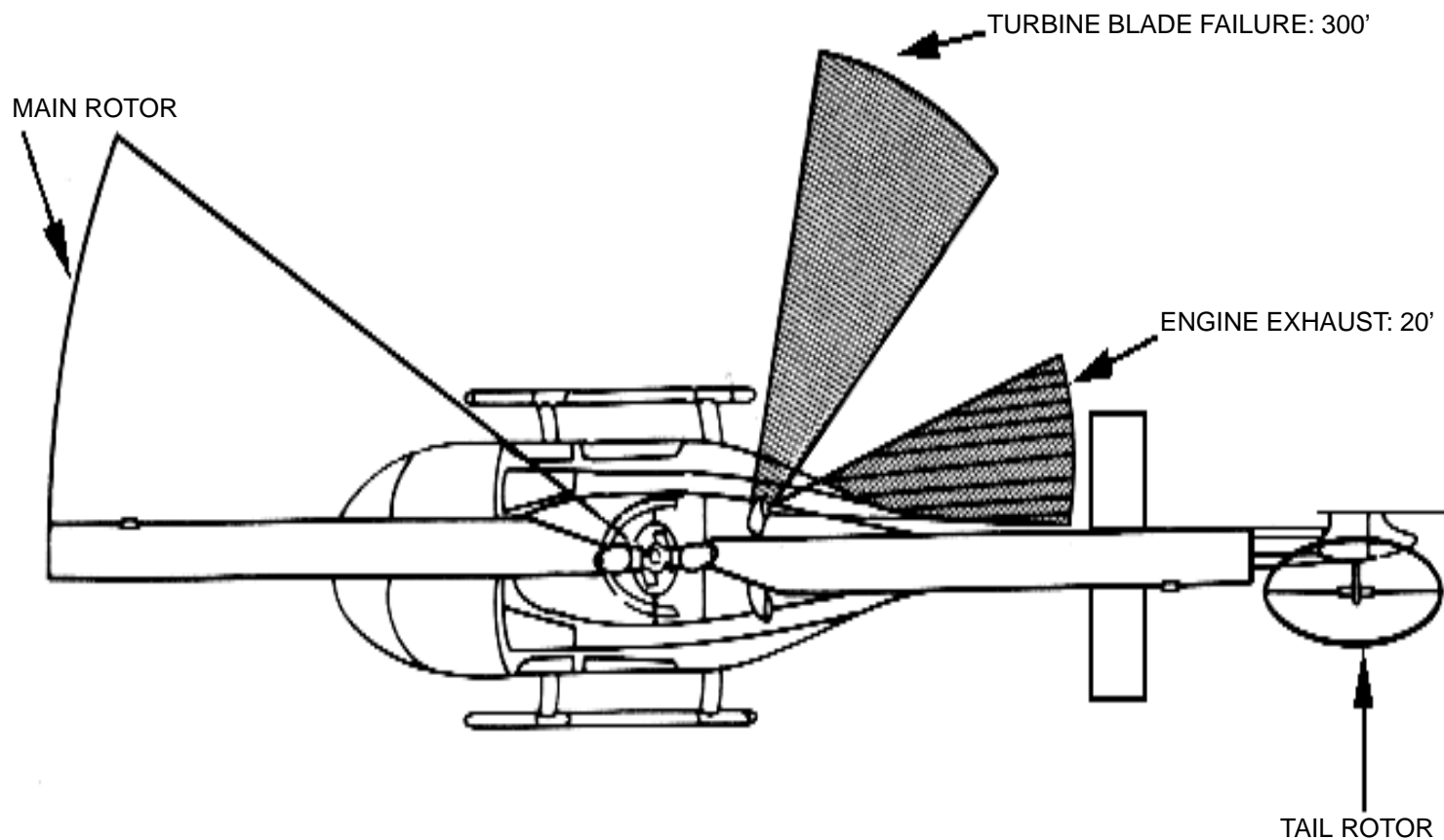
PILOT/CO-PILOT/CREWMAN SEAT



## AIRCRAFT HAZARDS

TH-57

ROTOR MINIMUM GROUND CLEARANCE	MAIN	6' 5"
	TAIL	1' 7"
ROTOR DISC DIAMETER	MAIN	33' 4"
	TAIL	5' 5"

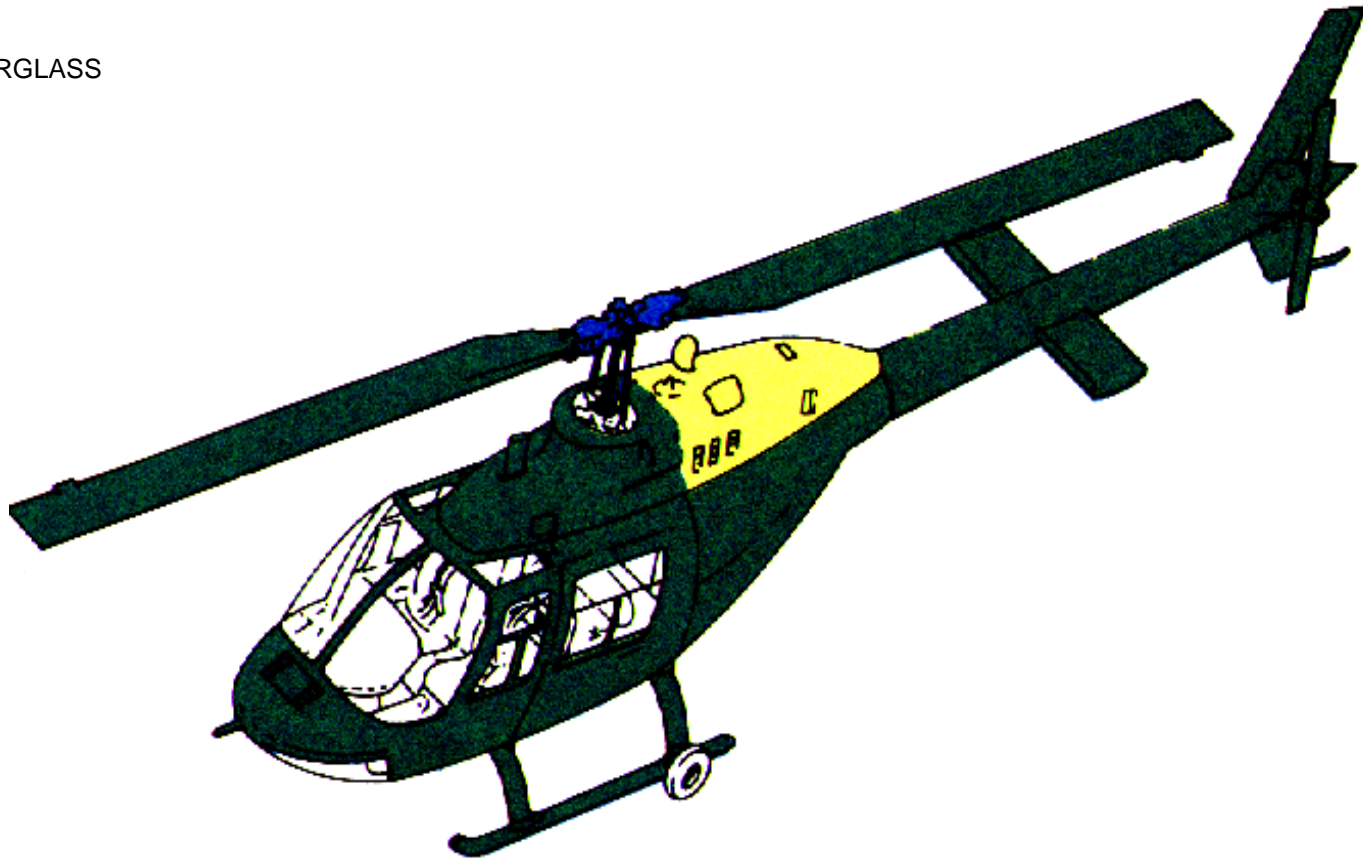


# AIRFRAME MATERIALS

TH-57

## LEGEND

	ALUMINUM
	STEEL
	TITANIUM
	OTHER: FIBERGLASS



## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw  
Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. The cockpit and cabin door on both sides of the aircraft are used for normal entry. Pull door handle out and push door open.

## 2. EMERGENCY ENTRY

- a. Access to the jettison handles from the outside can be gained by breaking the plexiglass windows, reaching in and pulling the jettison handles.

## NOTE:

The jettison handles are installed on the TH-57C aircraft only.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut with power rescue saw or crash ax. Cut along window frames.

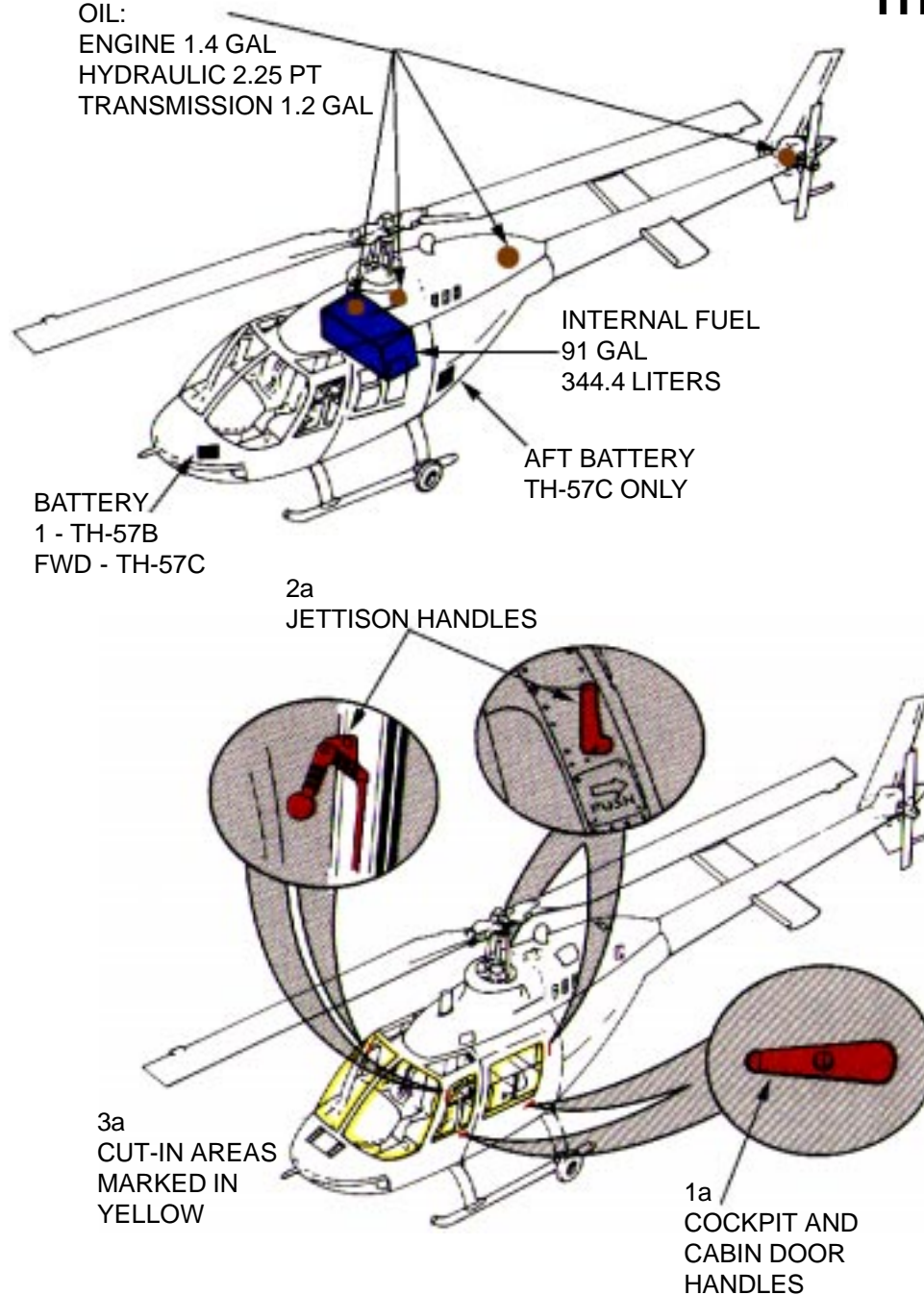
## NOTE:

Pneumatic system  
is 650 PSI.

## OIL:

ENGINE 1.4 GAL  
HYDRAULIC 2.25 PT  
TRANSMISSION 1.2 GAL

TH-57



# ENGINE SHUTDOWN AND BATTERY DISCONNECT

TH-57

## 1. ENGINE SHUTDOWN - TH-57B AND TH-57C

- a. Rotate throttle twist grip, located between forward seats, counterclockwise. Depress idle rel button and continue to rotate to SHUTOFF/STOP position.
- b. Place the TH-57B fuel valve switch, located on right side of pedestal instrument panel, in the OFF position.

OR

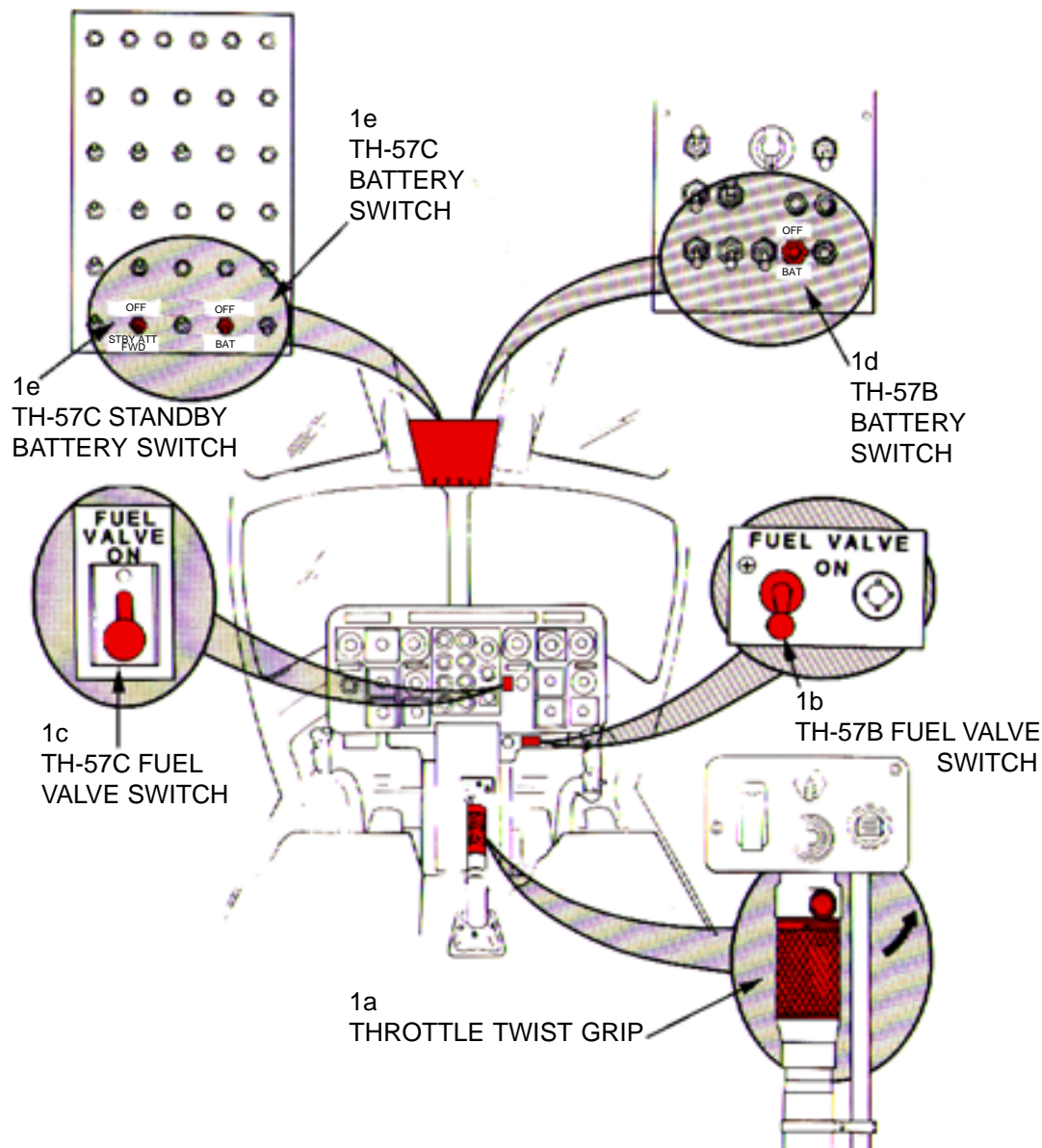
- c. Place the TH-57C fuel valve switch, located on the right forward instrument panel, in OFF position.
- d. Place the TH-57B battery switch, located on the forward center overhead console first row second switch on right, in the OFF position.

OR

- e. Place the TH-57C battery switch and standby battery switch, located on the forward center overhead console first row second and fourth switches, in the OFF position.

## 2. BATTERY DISCONNECT

- a. The forward battery is located in the nose section, accessible through a hinged door. The aft battery in the TH-57C is located in the aft portion of the baggage compartment, accessible through the baggage door on the left side of the aircraft. Disconnect either battery by disconnecting the terminal fittings.





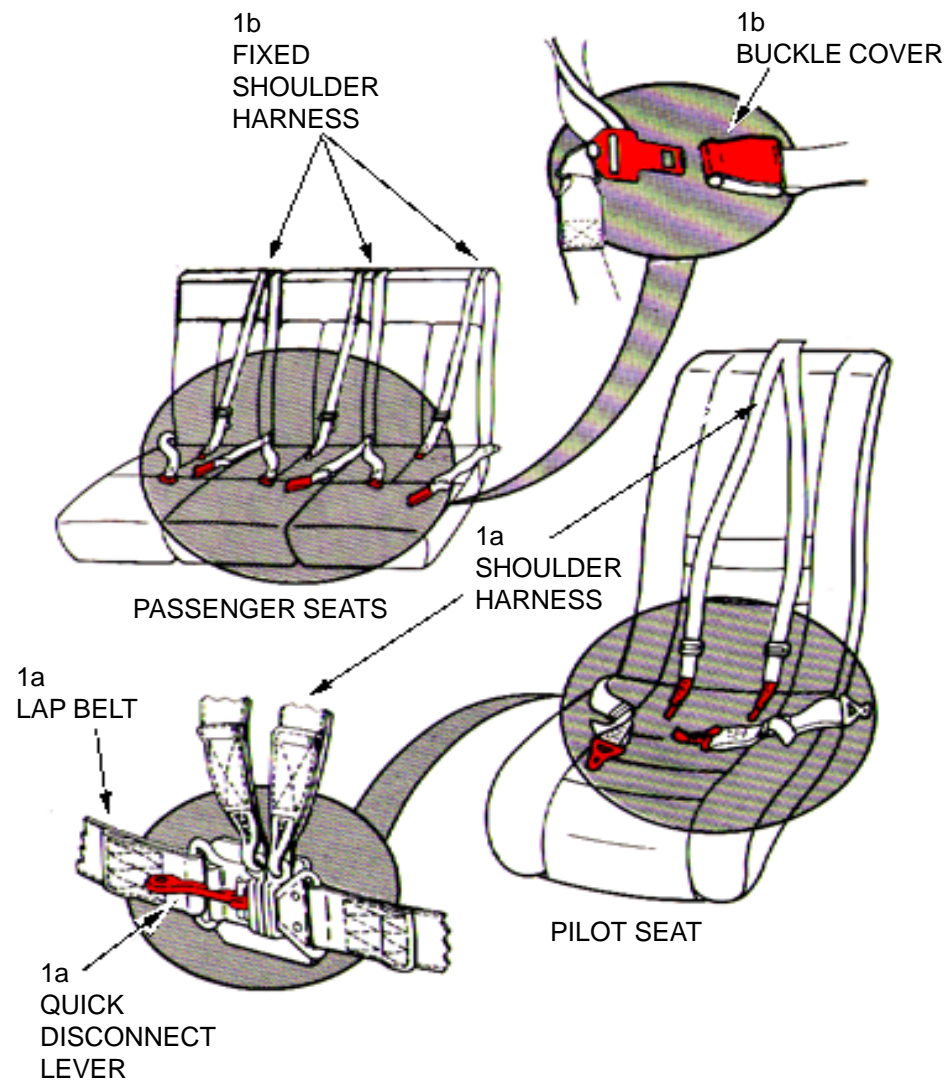
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

The pilot and co-pilot are attached to the seats with shoulder harnesses and a lap belt equipped with a quick disconnect buckle. Passengers and crewmembers have a lap belt and a fixed shoulder harness.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for the pilot and co-pilot.
- b. Lift buckle cover to release lap belt (airline type) and fixed shoulder harness for the passengers and crewmembers.



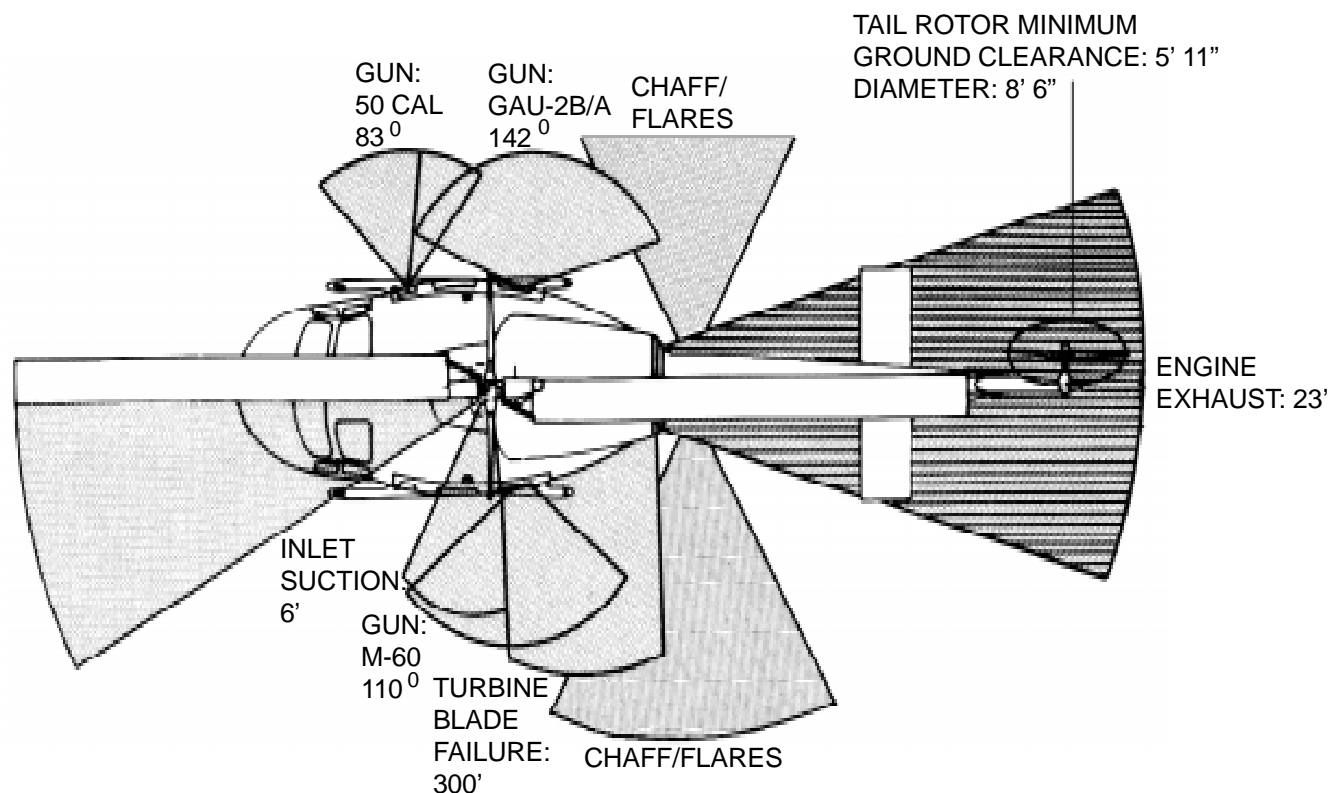
**AIRCRAFT HAZARDS****NOTE:**

The US Navy UH-1N is the same as the USAF UH-1N. Refer to Chapter 9, pages UH-1N.1 thru UH-1N.3. For additional procedures see US Army UH-1. Refer to Chapter 13, pages UH-1.1 thru UH-1.3.

MAIN ROTOR MINIMUM  
GROUND CLEARANCE: 7' 2"  
DIAMETER: 48'

**WARNING**

Rotor blade may flap or dip  
down as low as 5 feet.

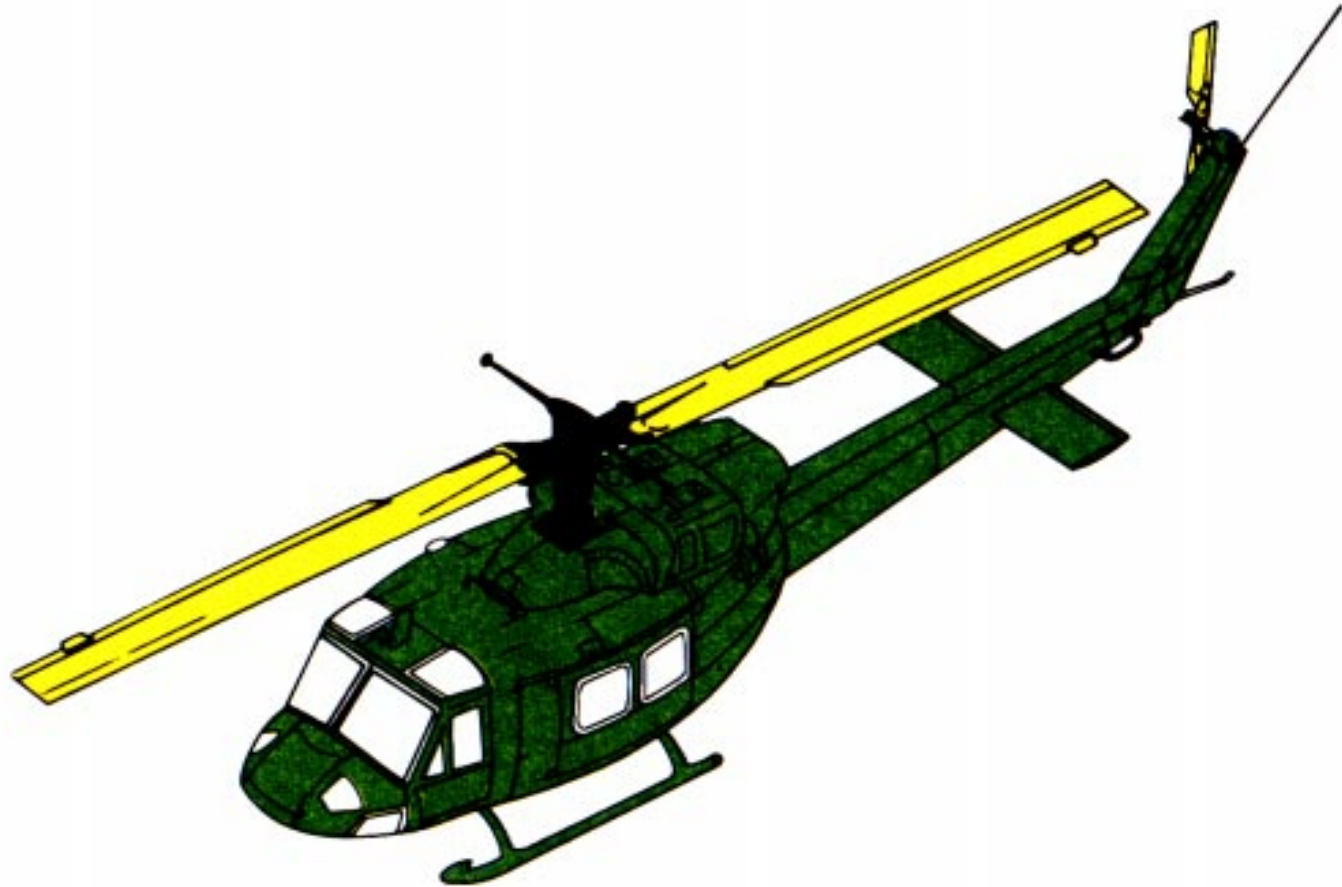


# AIRFRAME MATERIALS

UH-1N

## LEGEND

- ALUMINUM
- STEEL
- OTHER  
FIBERGLASS



## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

Crash Ax

## AIRCRAFT ENTRY

## 1. NORMAL ENTRY

- a. Rotate crew door handles (both sides), located forward of passenger doors, then pull out and forward to open doors.
- b. Rotate passenger cargo door handles (both sides), located aft of crew doors, down and slide doors aft to open.

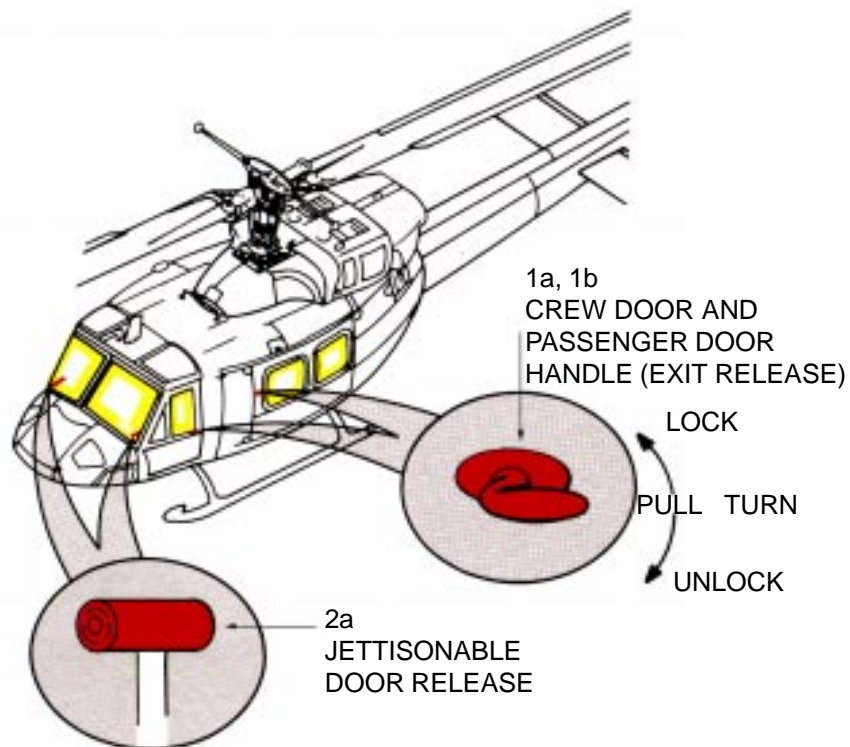
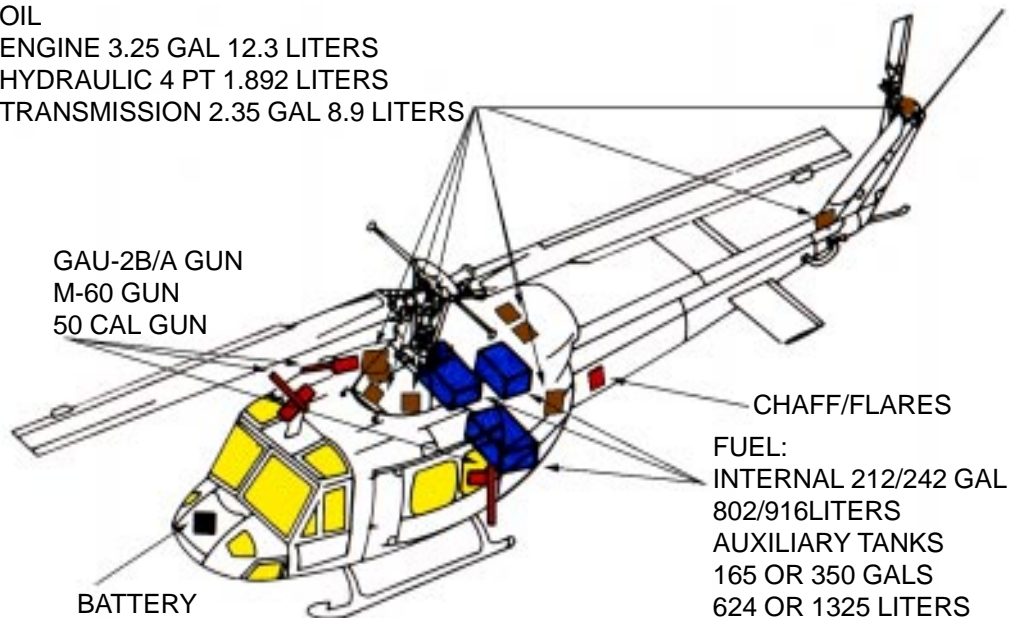
## 2. EMERGENCY ENTRY

- a. If the pilot/co-pilot crew exits are jammed and access cannot be gained through the passenger's exits, slide or break the pilot or co-pilot windows, reach forward and pull jettisonable door release.
- b. If the doors do not jettison, break the windshield or any other windows to gain entrance.

## 3. CUT-IN/FORCED ENTRY

- a. Windows are made of acrylic plastic and may be cut using a power rescue saw or crash ax. Cut along window frames.

OIL  
ENGINE 3.25 GAL 12.3 LITERS  
HYDRAULIC 4 PT 1.892 LITERS  
TRANSMISSION 2.35 GAL 8.9 LITERS



UH-1N

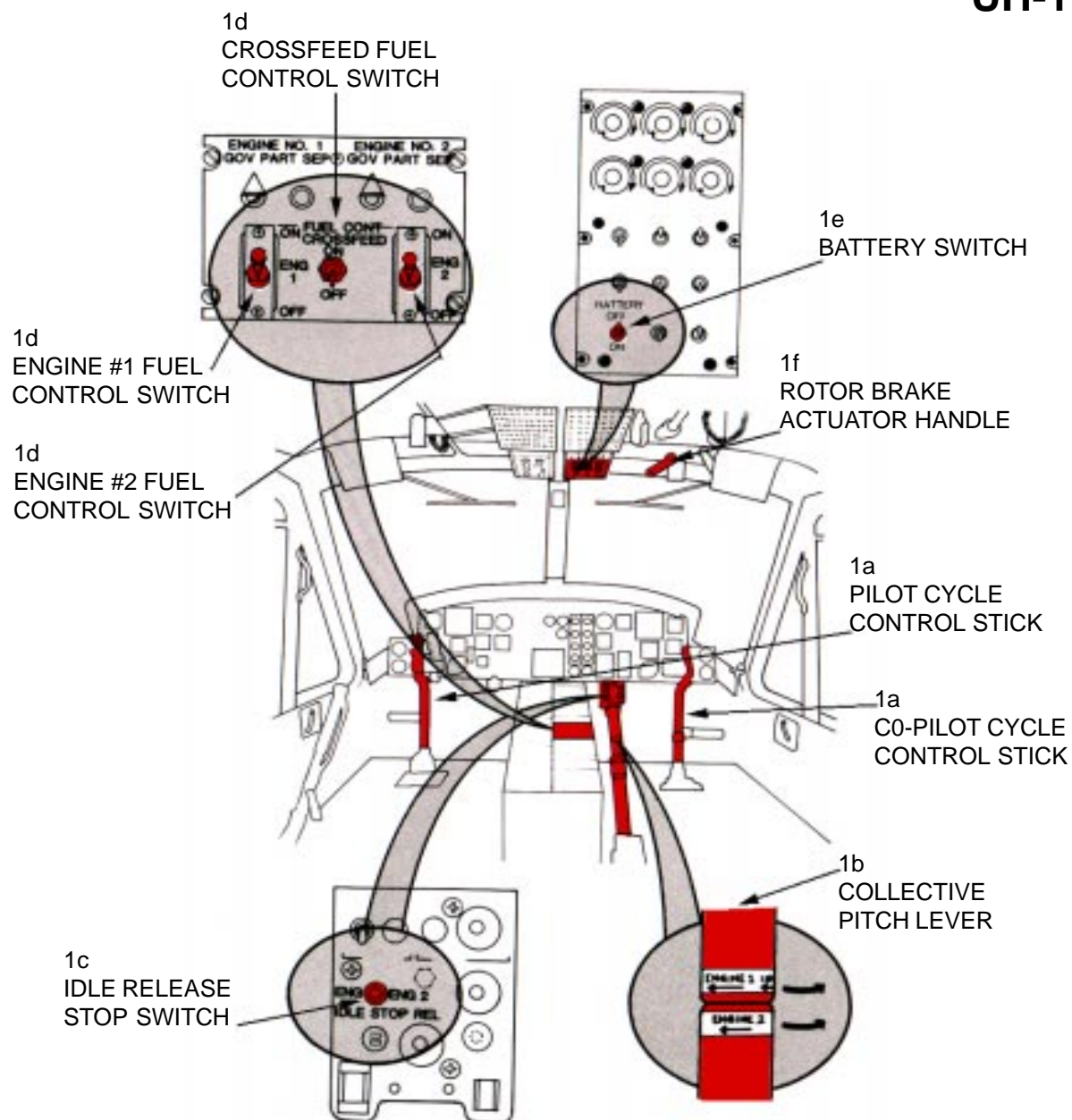
# ENGINE SHUTDOWN AND BATTERY DISCONNECT

## 1. ENGINE SHUTDOWN

- Center either cycle control stick, located forward of pilot and co-pilot seats, and hold.
- Push the collective pitch lever, located at co-pilot station, down into down lock.
- Engage engine #1 idle release stop switch, located on pilot's collective only, then close throttle #1 by twisting grip to right to shut down engine #1. Repeat procedure for shutting down engine #2.
- Place engine #1, engine #2, and crossfeed fuel control switches in OFF position.
- Place battery switch, located on co-pilot's overhead panel, in OFF position.
- Pull down on rotor brake actuator handle, located on co-pilot's overhead center windshield area, to position of greatest pressure and hold until rotor stops turning.

## 2. BATTERY DISCONNECT

- If battery, located in the nose compartment, requires disconnecting, disconnect if time and access permits.





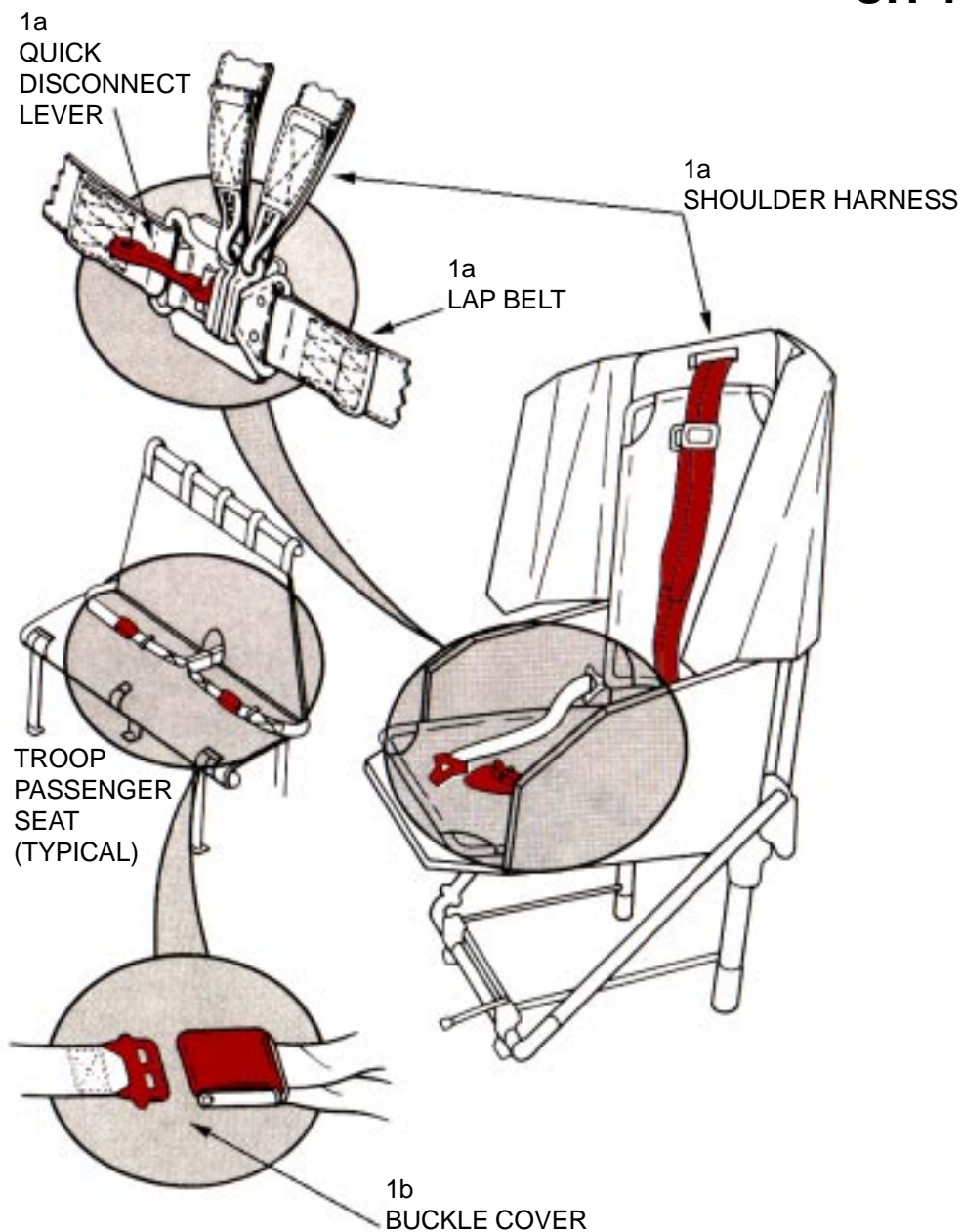
# AIRCREW EXTRACTION

## 1. AIRCREW EXTRACTION

### NOTE:

The pilot/co-pilot are attached to the seats by shoulder harnesses secured to a lap belt equipped with a quick disconnect lever. Troop/passenger seats have a lap belt equipped with a quick disconnect buckle cover.

- a. Lift quick disconnect lever to release shoulder harnesses and lap belt for pilot and co-pilot.
- b. Lift buckle cover to release lap belt for troop/passengers. These belts are airline type.



UH-1N